

FIG. 1

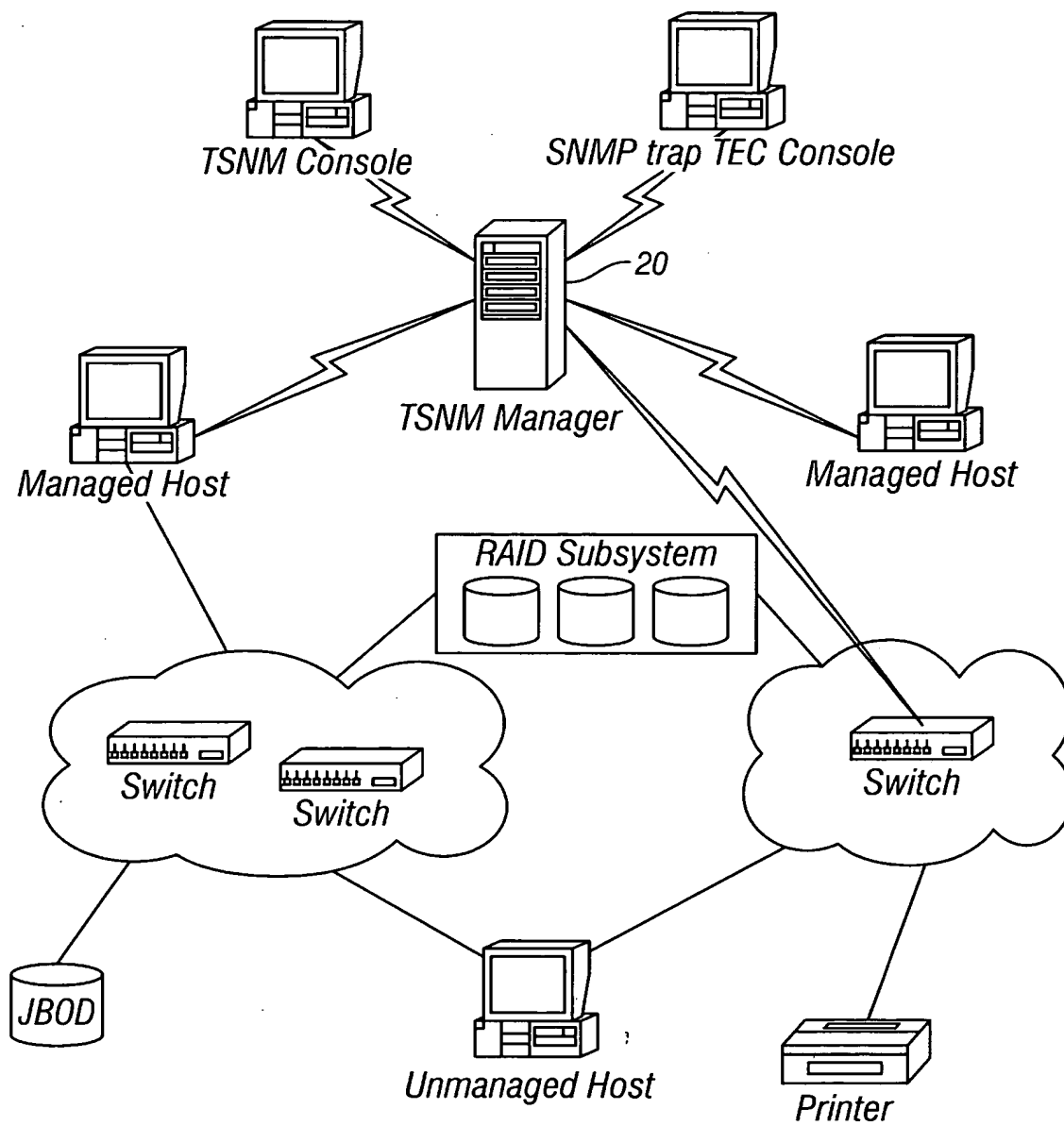


FIG. 2

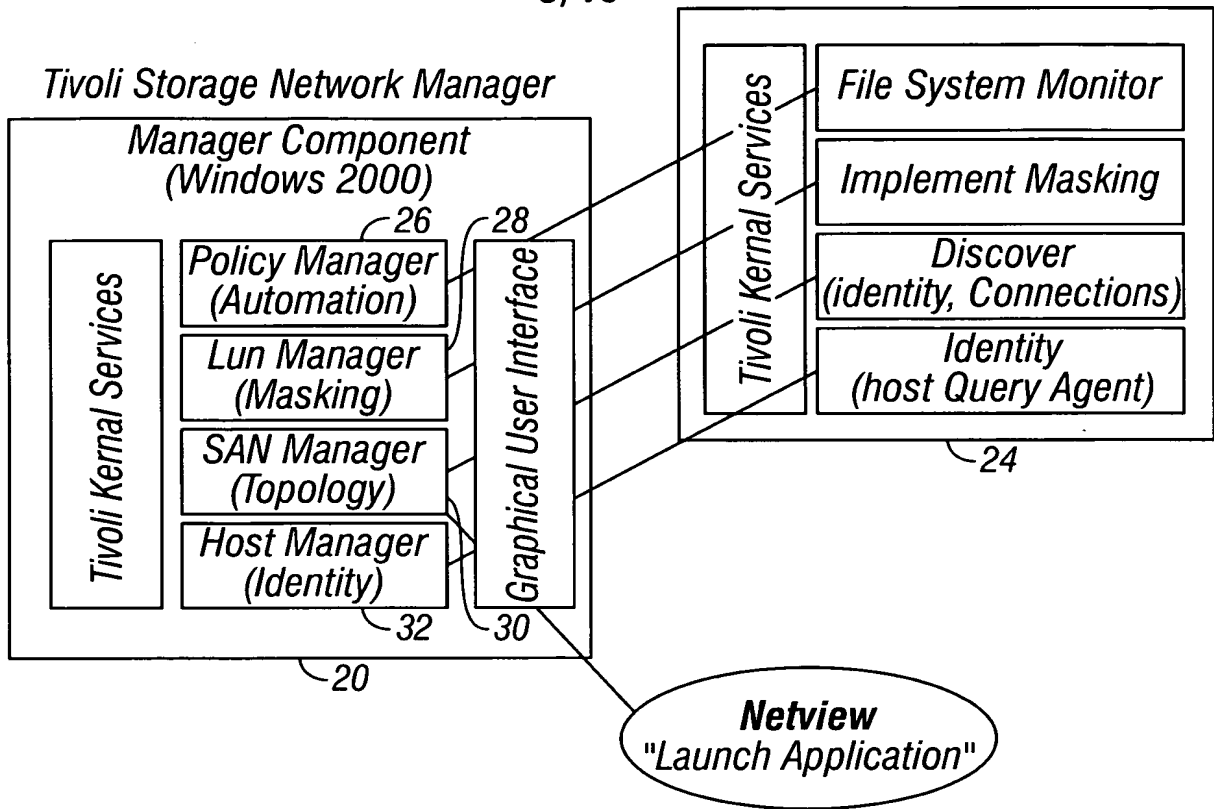


FIG. 3

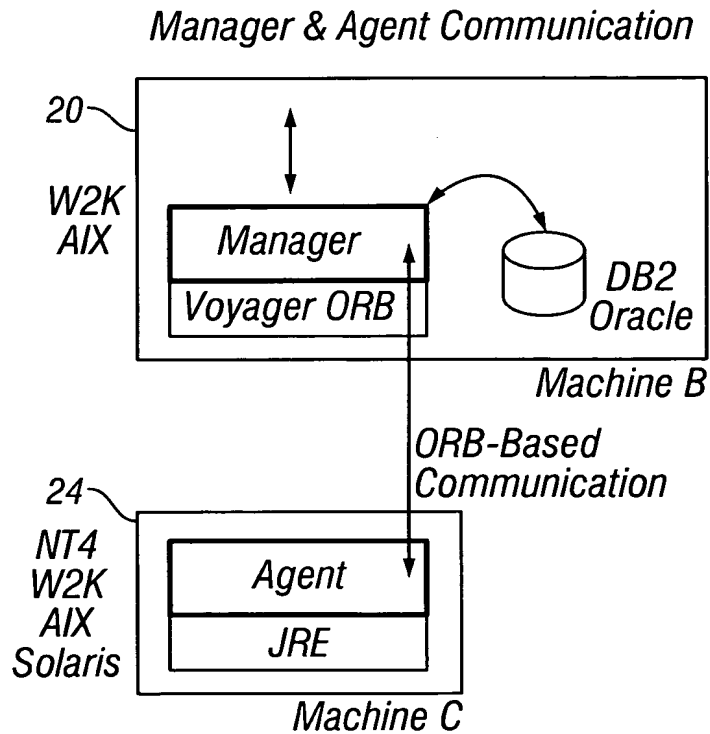


FIG. 4

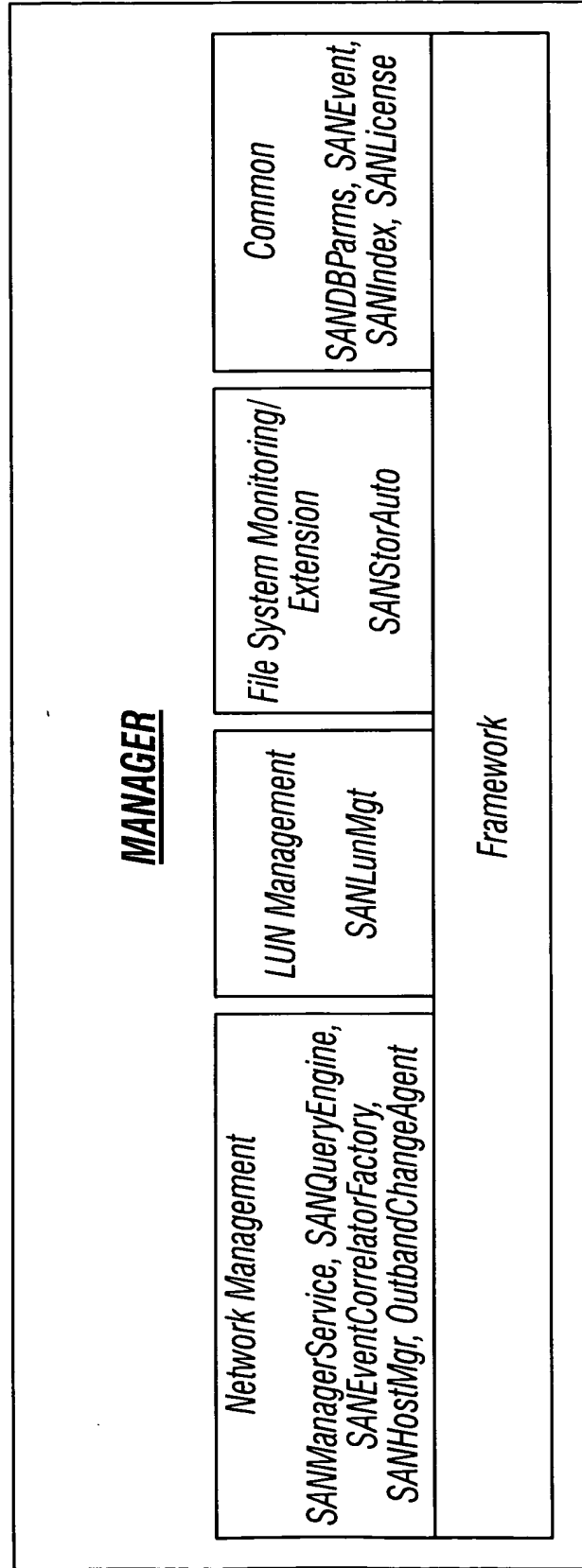


FIG. 5

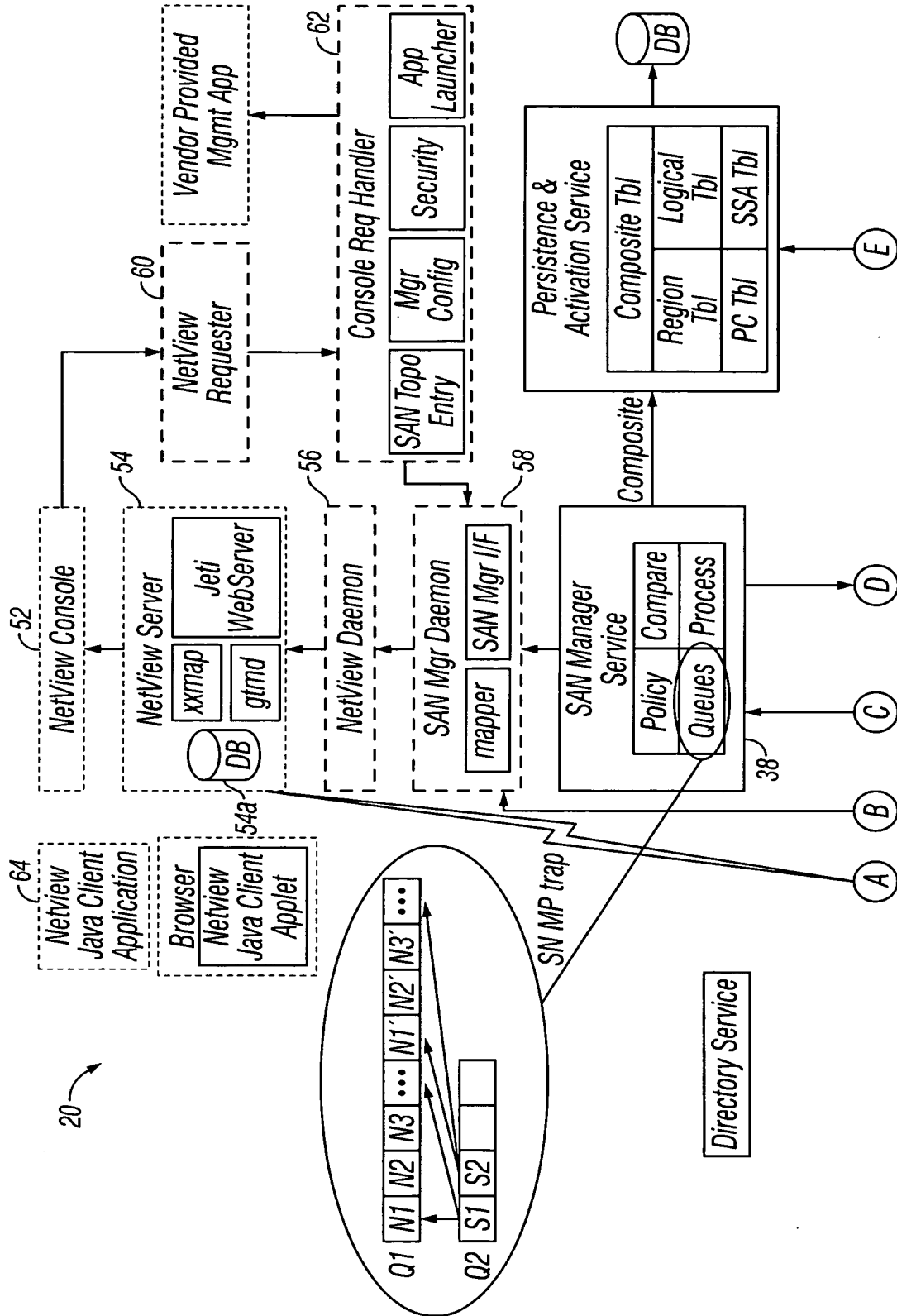


FIG. 6A

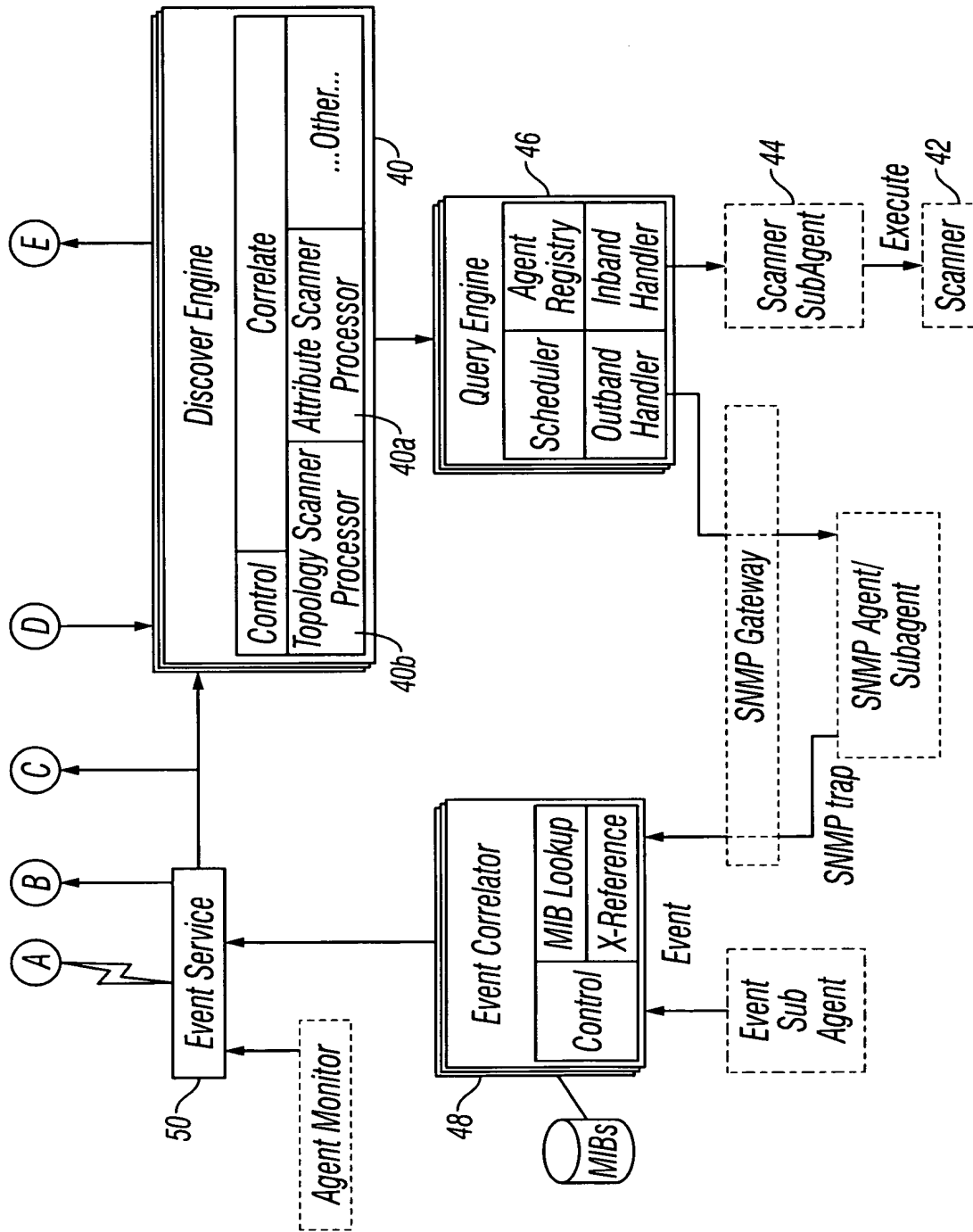


FIG. 6B

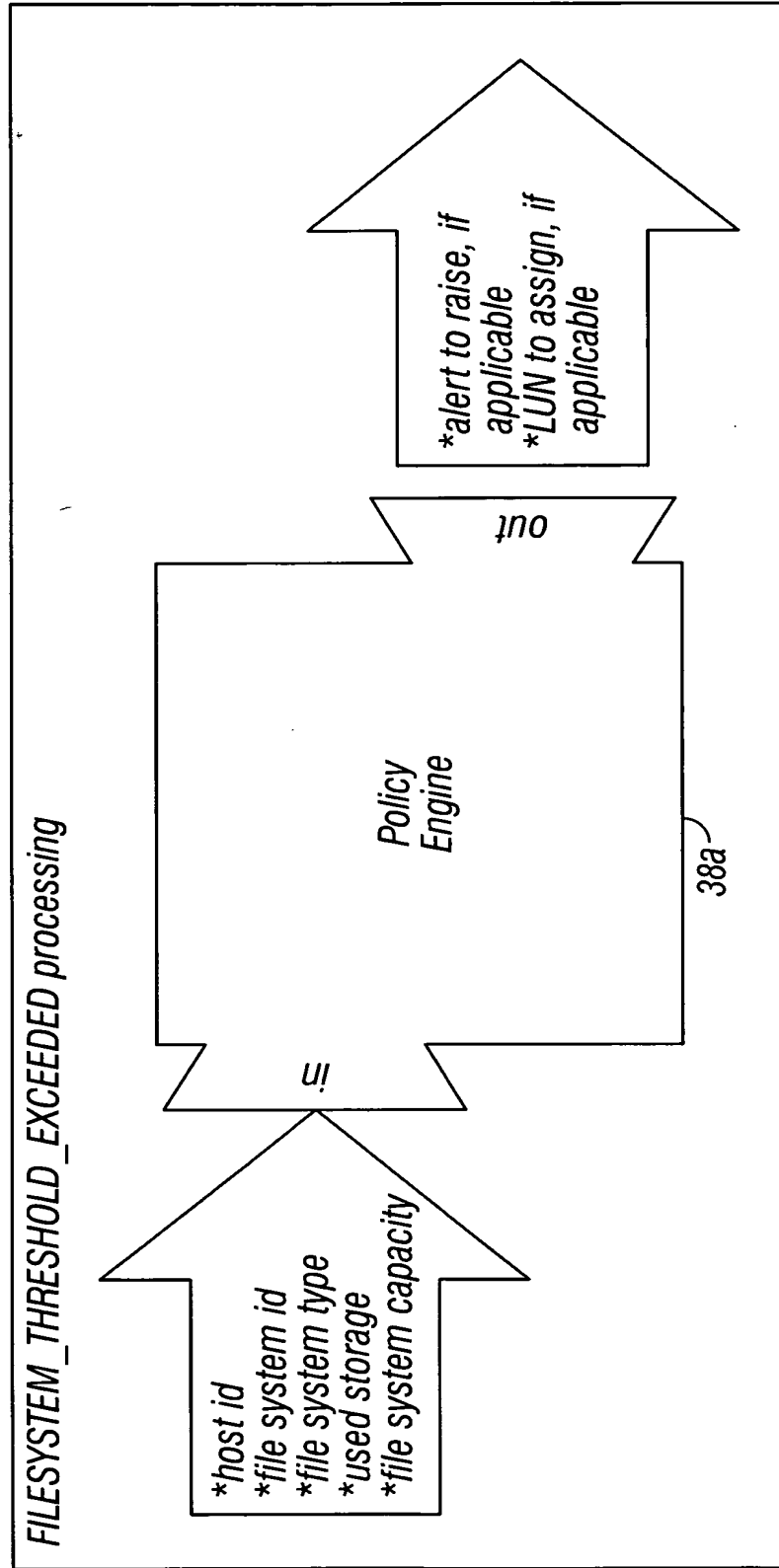


FIG. 7A

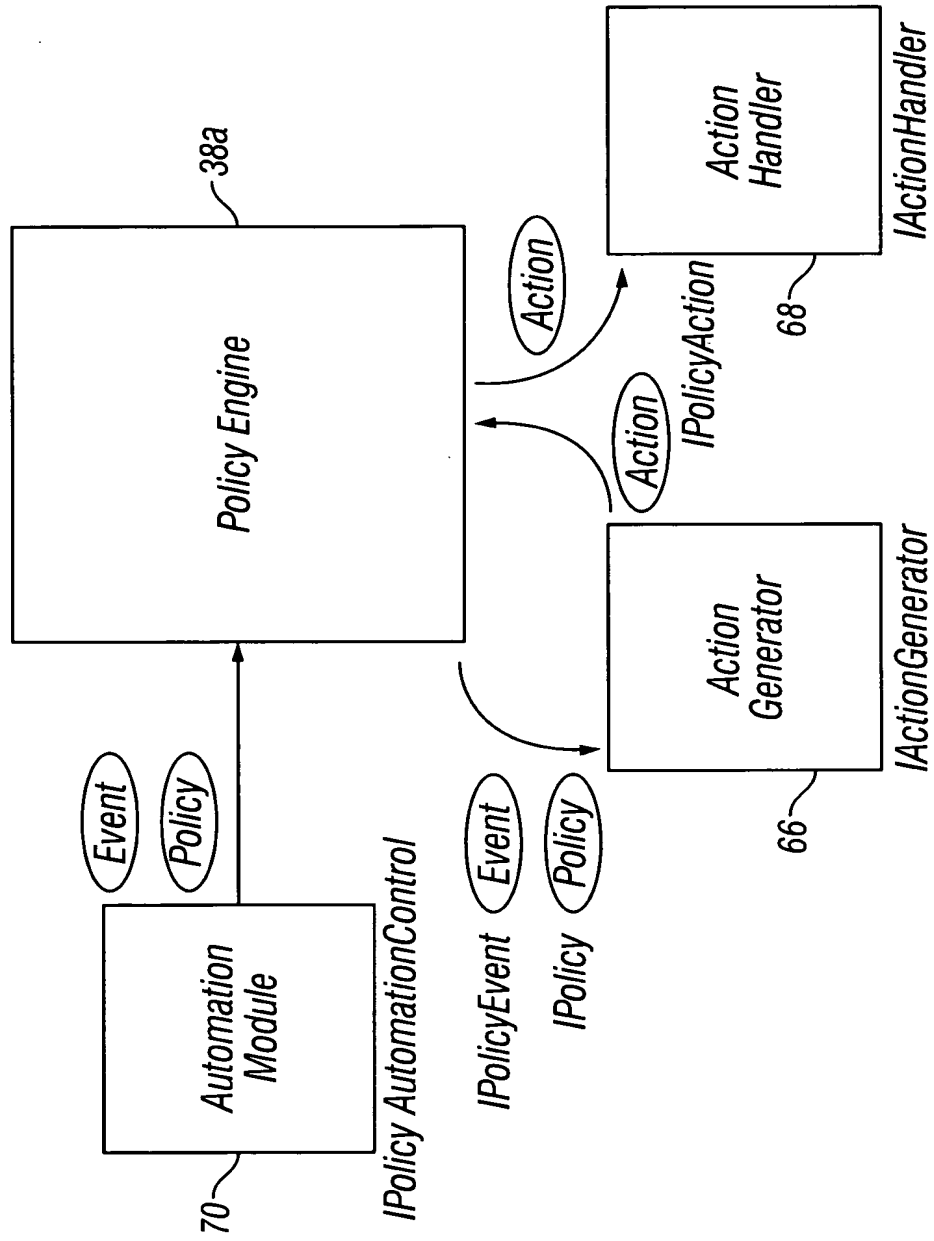
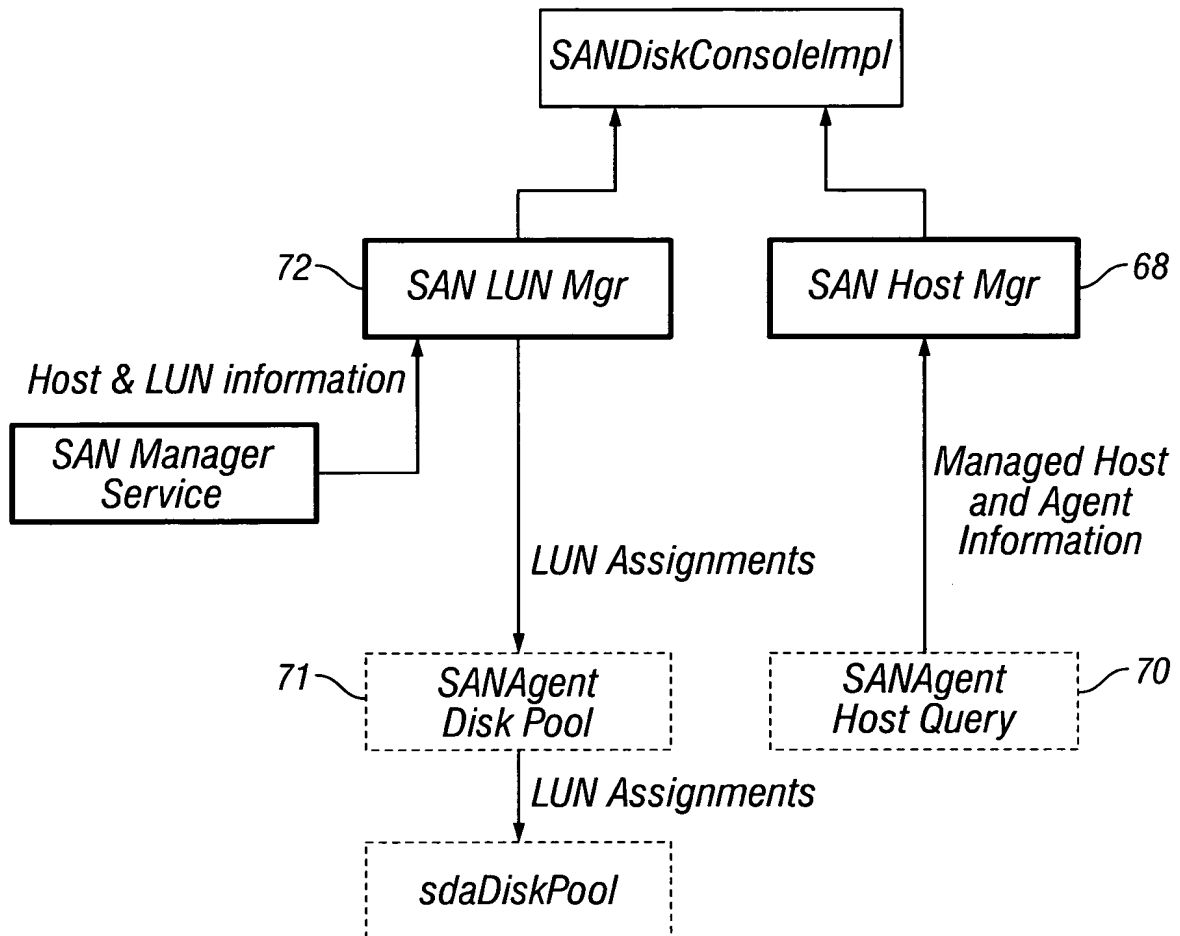


FIG. 7B





**FIG. 8**

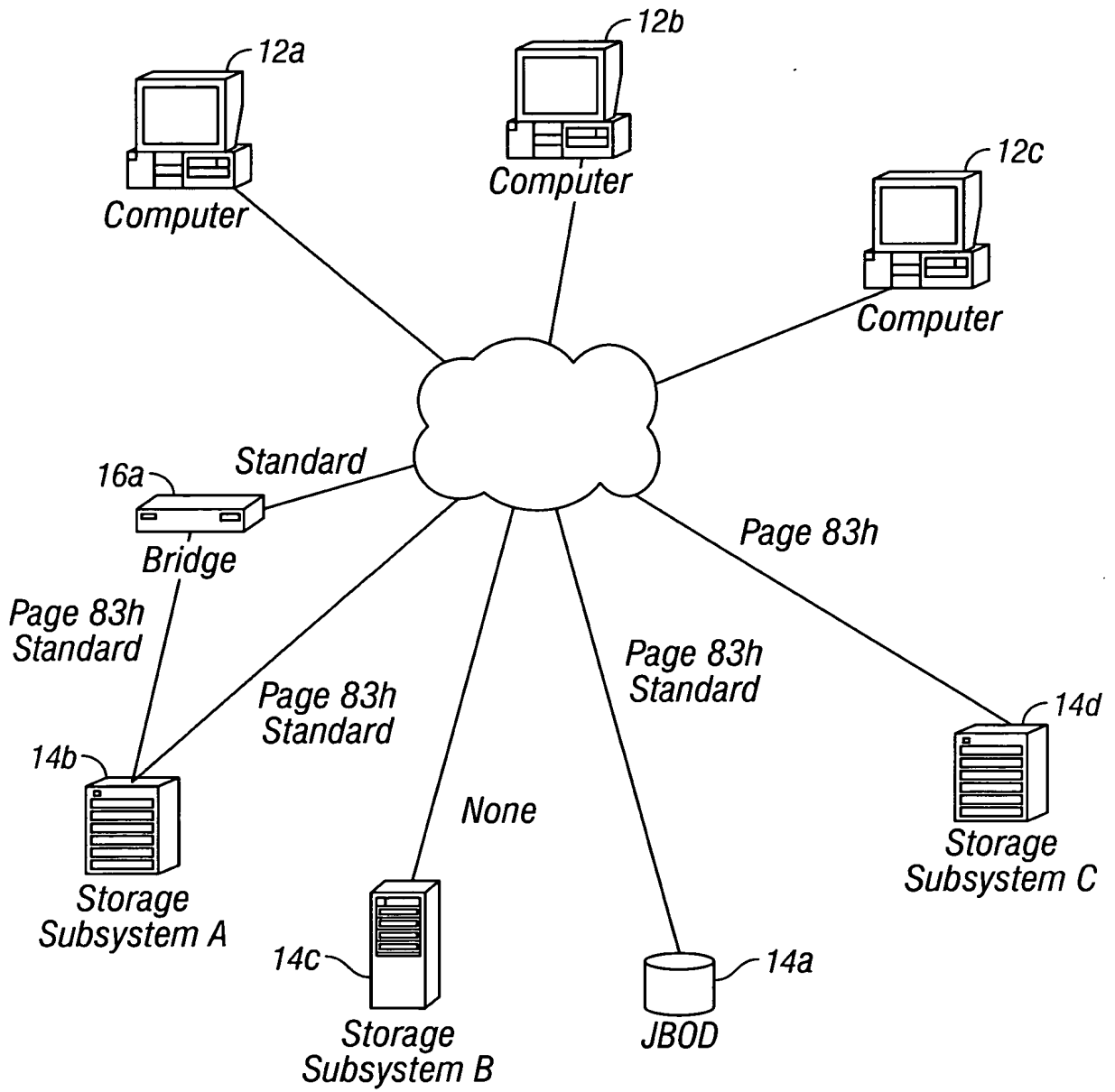


FIG. 9

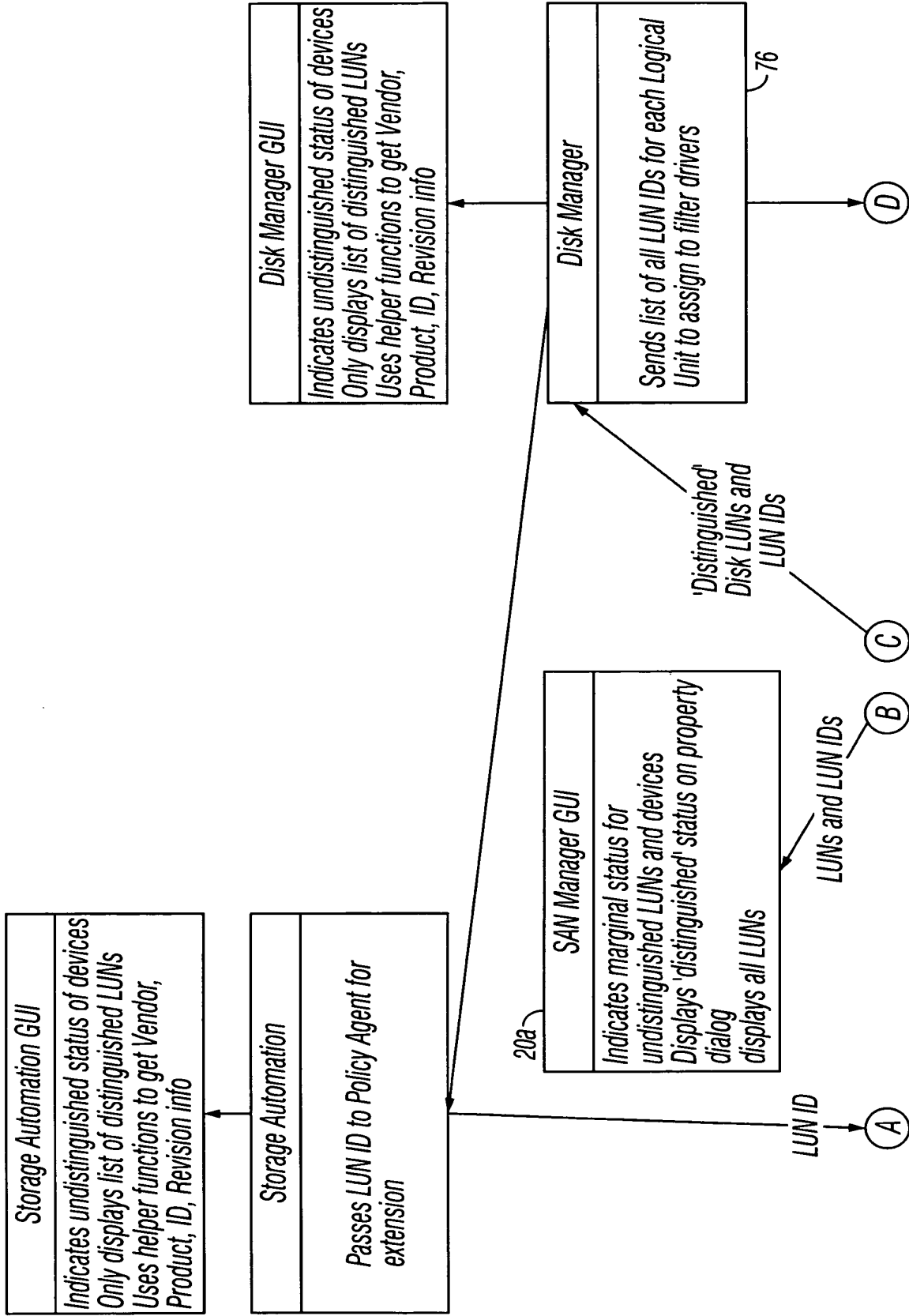


FIG. 10A

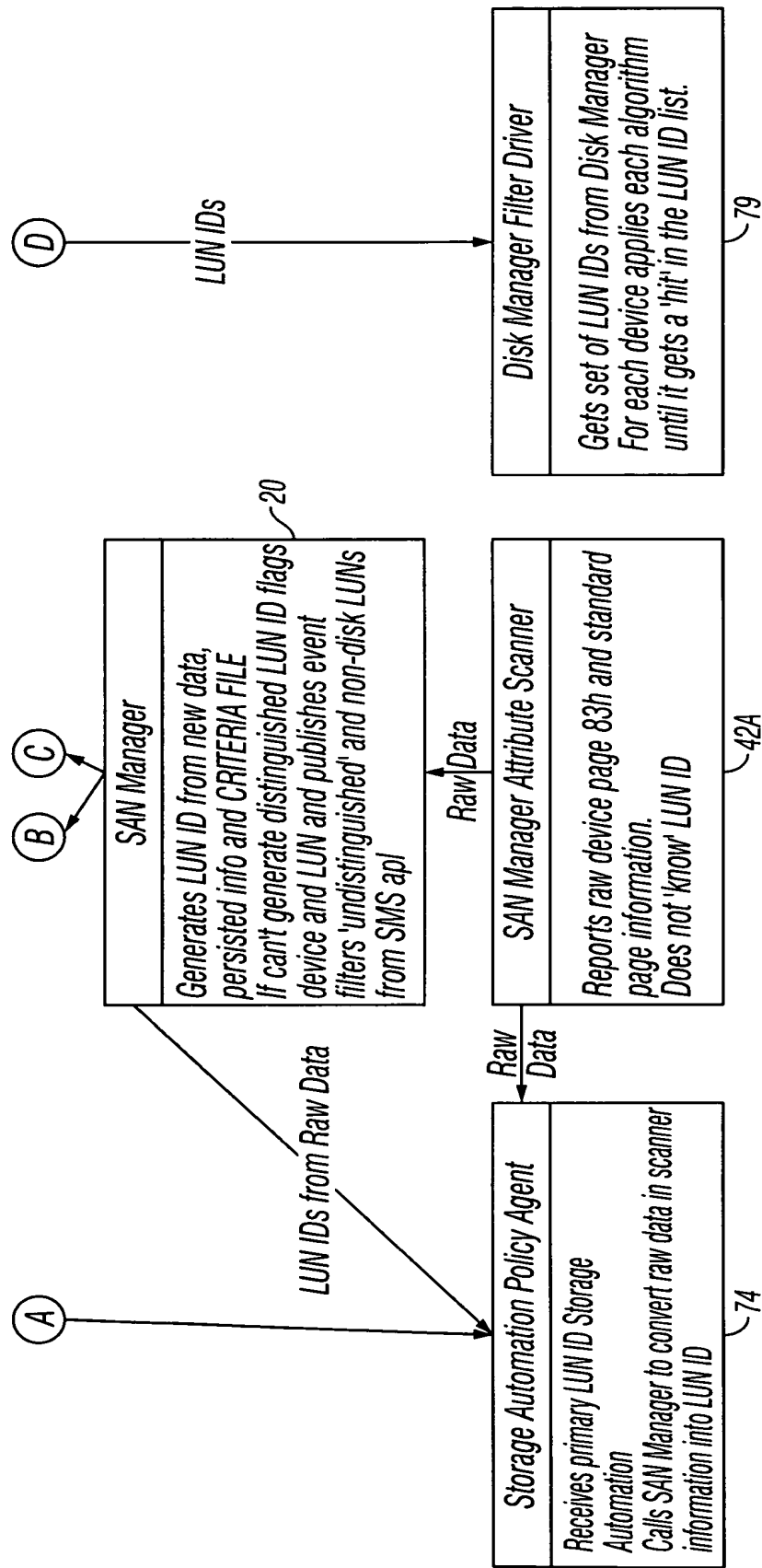
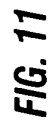


FIG. 10B



**FIG. 11**

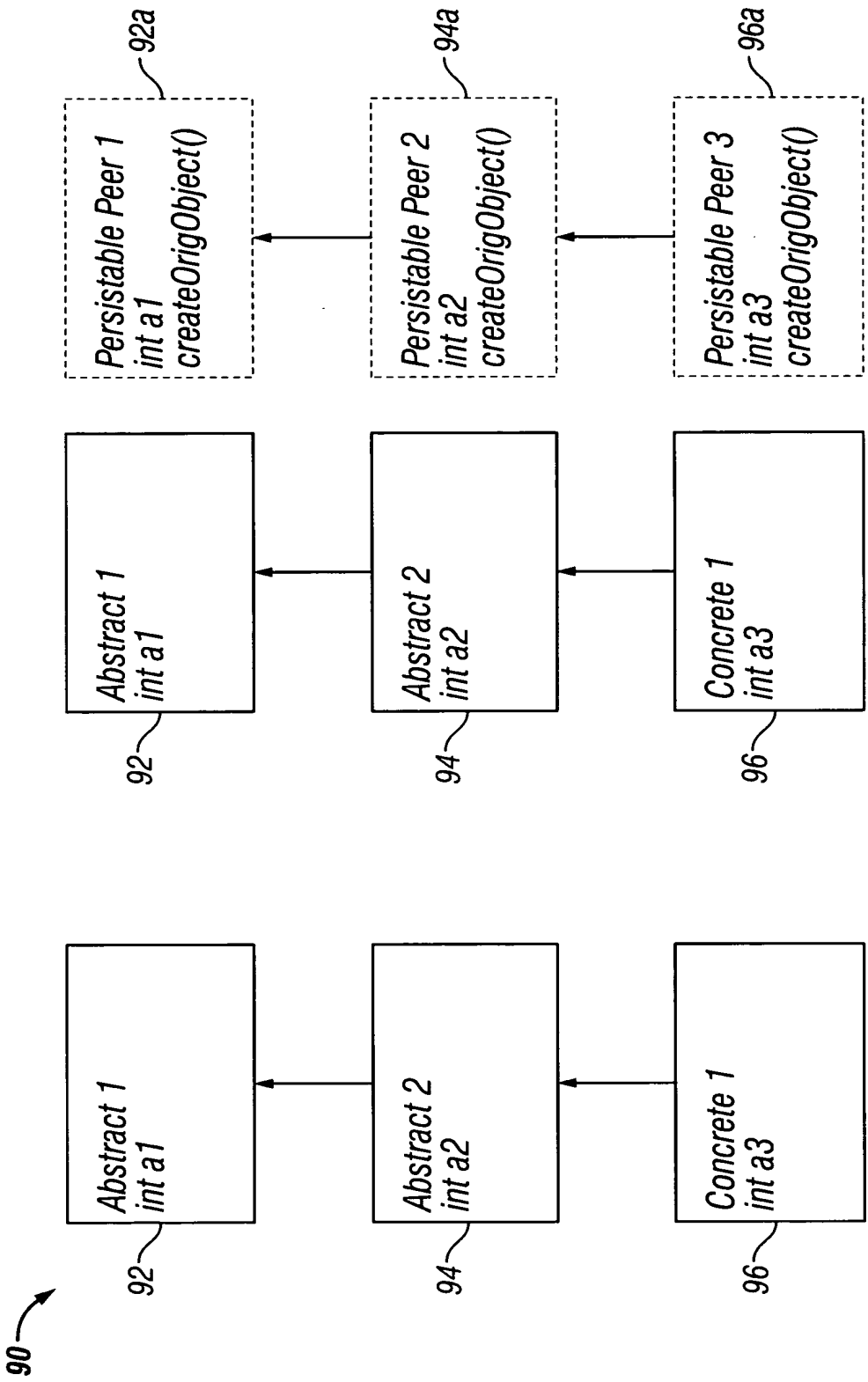


FIG. 12

FIG. 13

***FIG. 14A***

***FIG. 14B***

***FIG. 14C***

***FIG. 14D***

***FIG. 14***

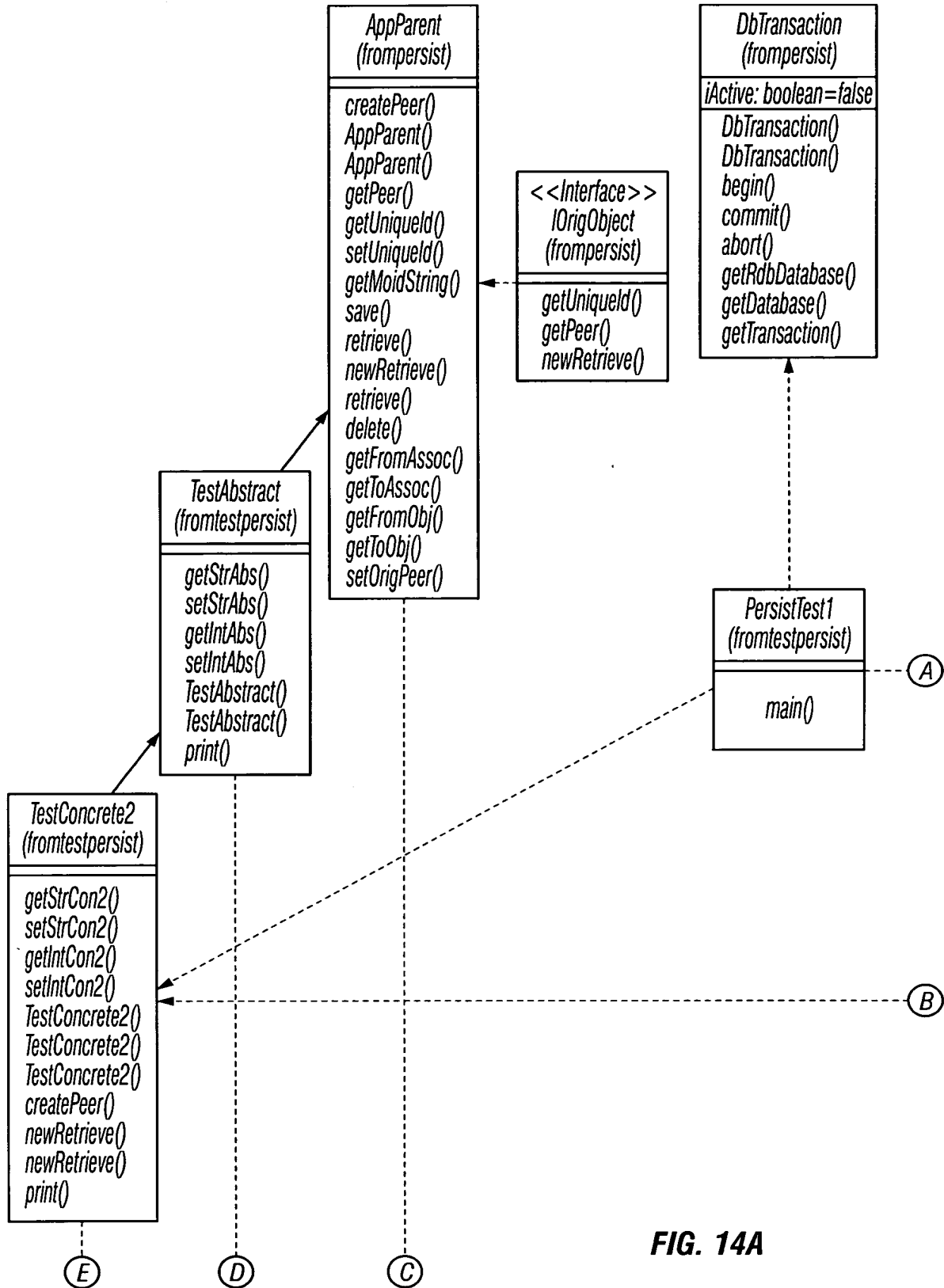


FIG. 14A



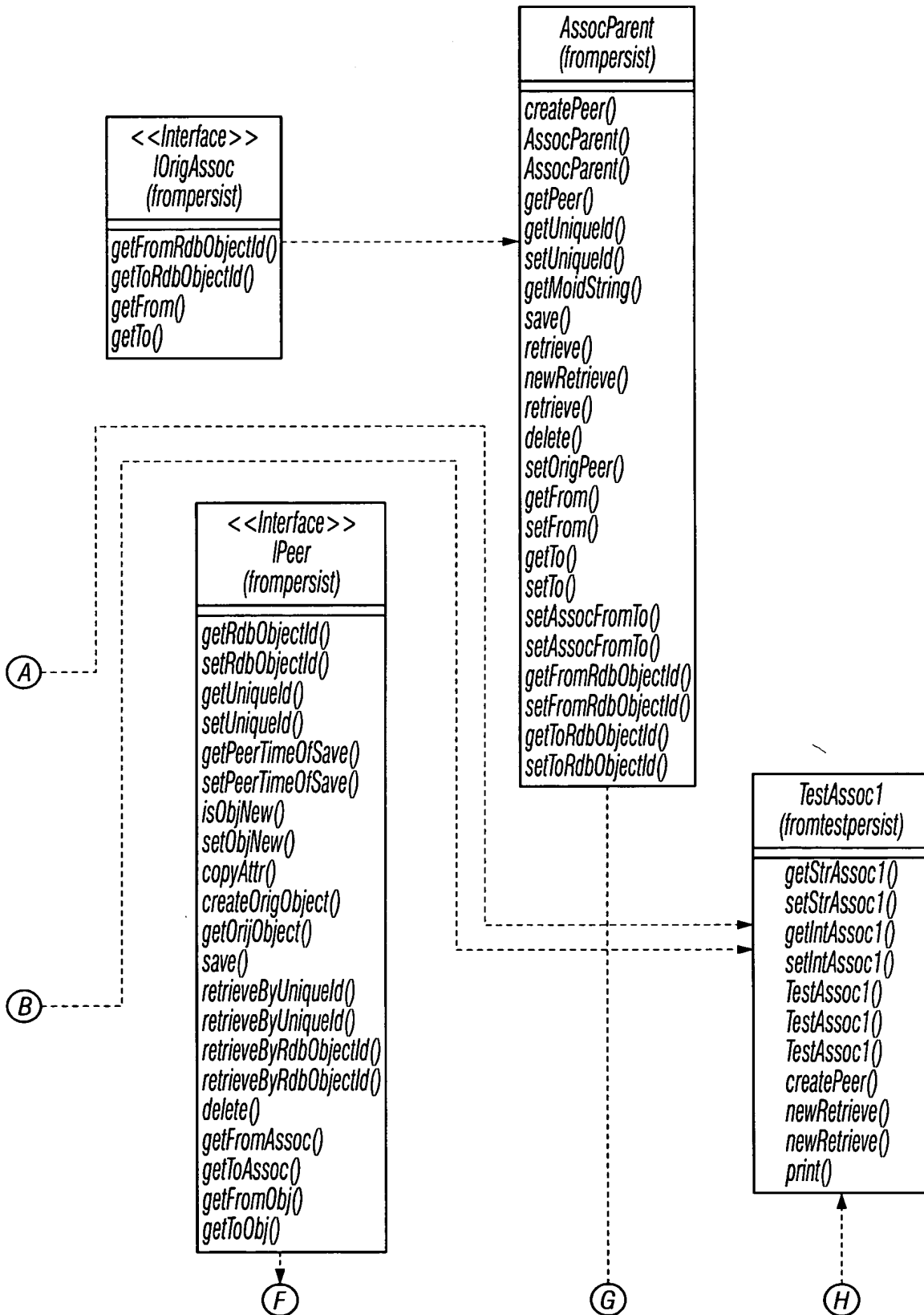


FIG. 14B

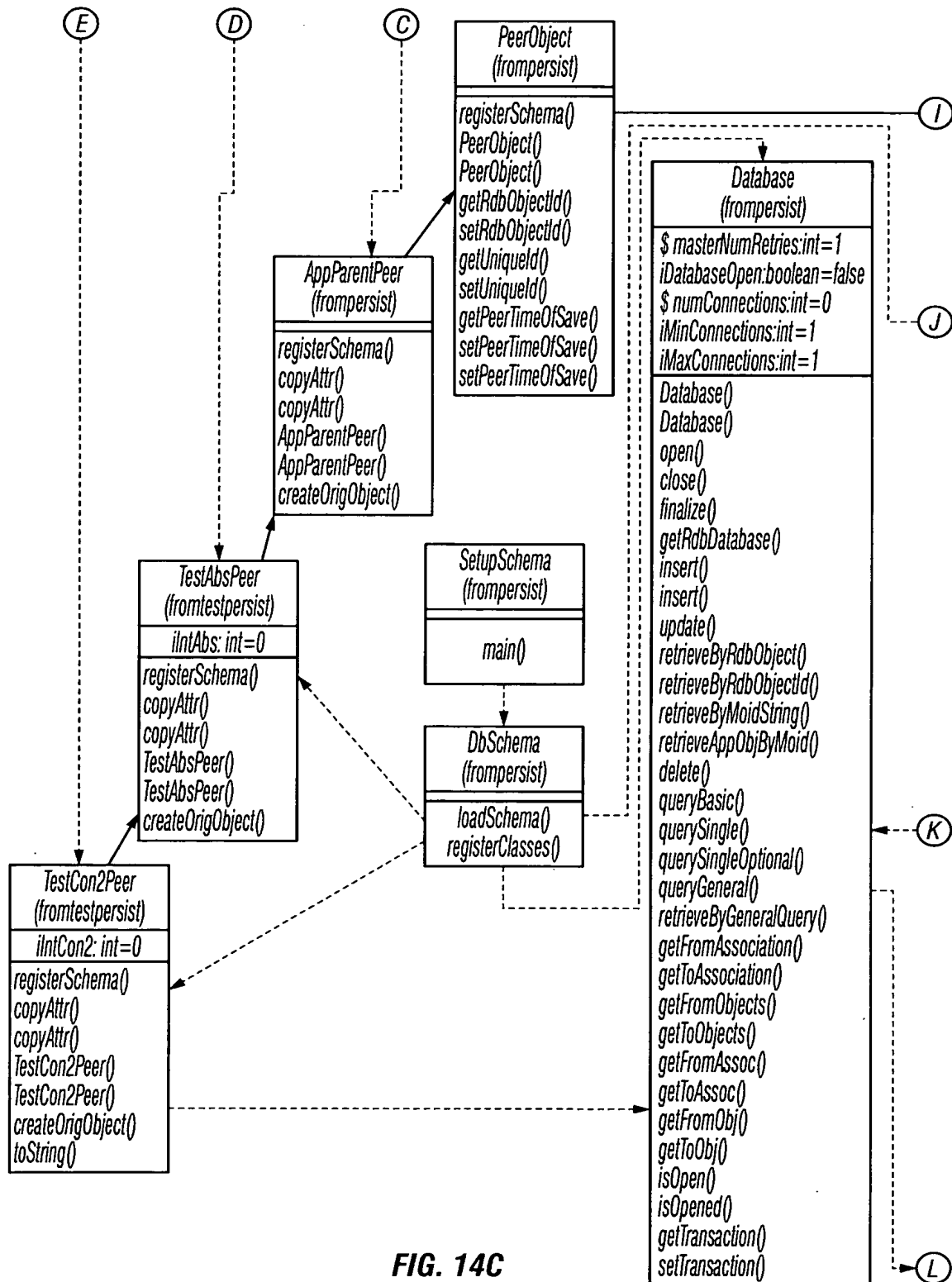


FIG. 14C

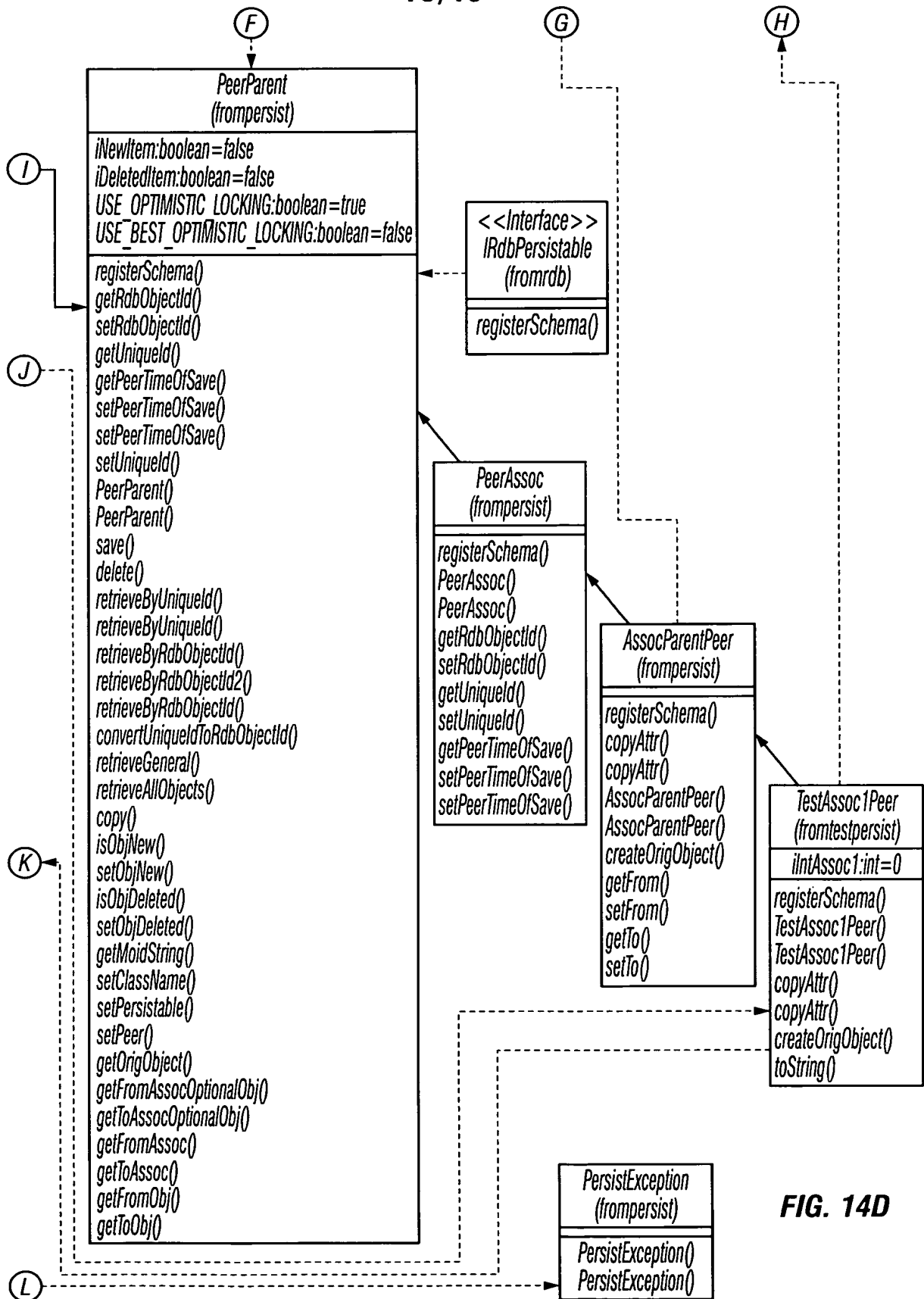
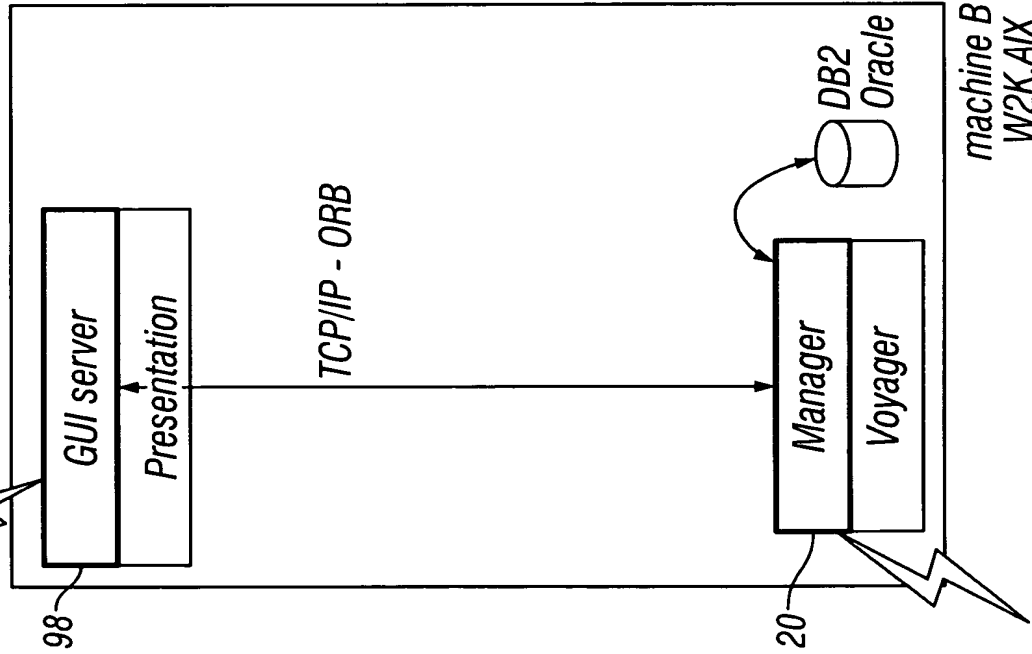


FIG. 14D

## GUI (server) & Manager communication



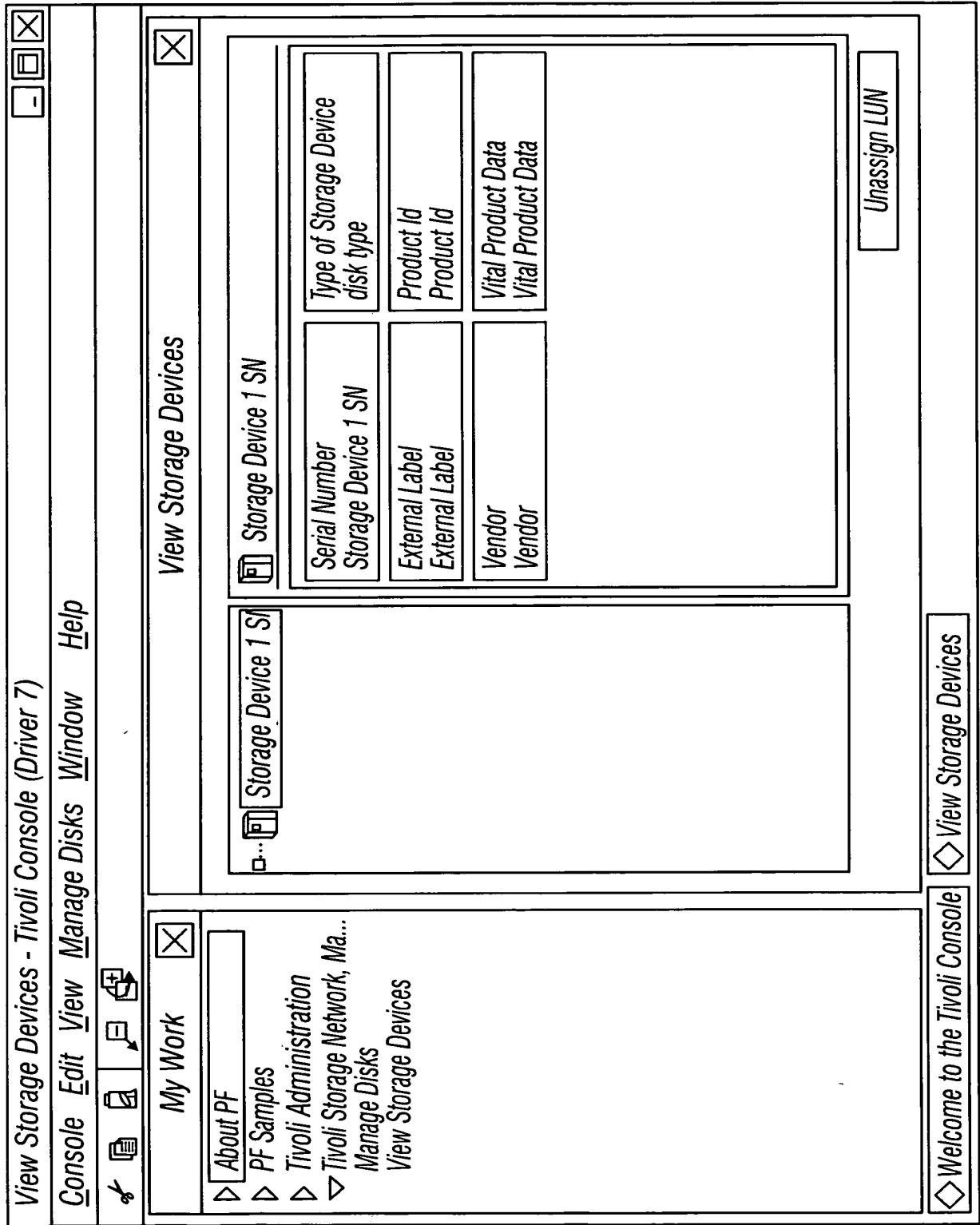
- ▲ Manager creates objects (services) and "bind" them to Voyager directory service
- ▲ GUI "looks up" the object by name in directory service and get the object "proxy"
- ▲ GUI invokes object methods to obtain info or perform operation

Example: Class TDMServer()

```
LUN[] getAccessibleLunsByHost(HostaHost)
LUN[] getAccessibleLunsByHost(java.lang.String ip)
LUN[] getAllAccessibleLuns()
LUN[] getAssignedLunsByHost(HostaHost)
LUN[] getAssignedLunsByHost(java.lang.String ip)
```

```
//Look up the ITdm Server proxy object from the directory service
ITdmServeraTdm=(ITdm Server) Namespace.lookup(
"/localhost:9000/sandir/ITdmServer");
//Get a list of all LUN objects in the region.
Lun[] temp1=aTdm.getAllAccessibleLuns();
```

FIG. 15



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FIG. 16

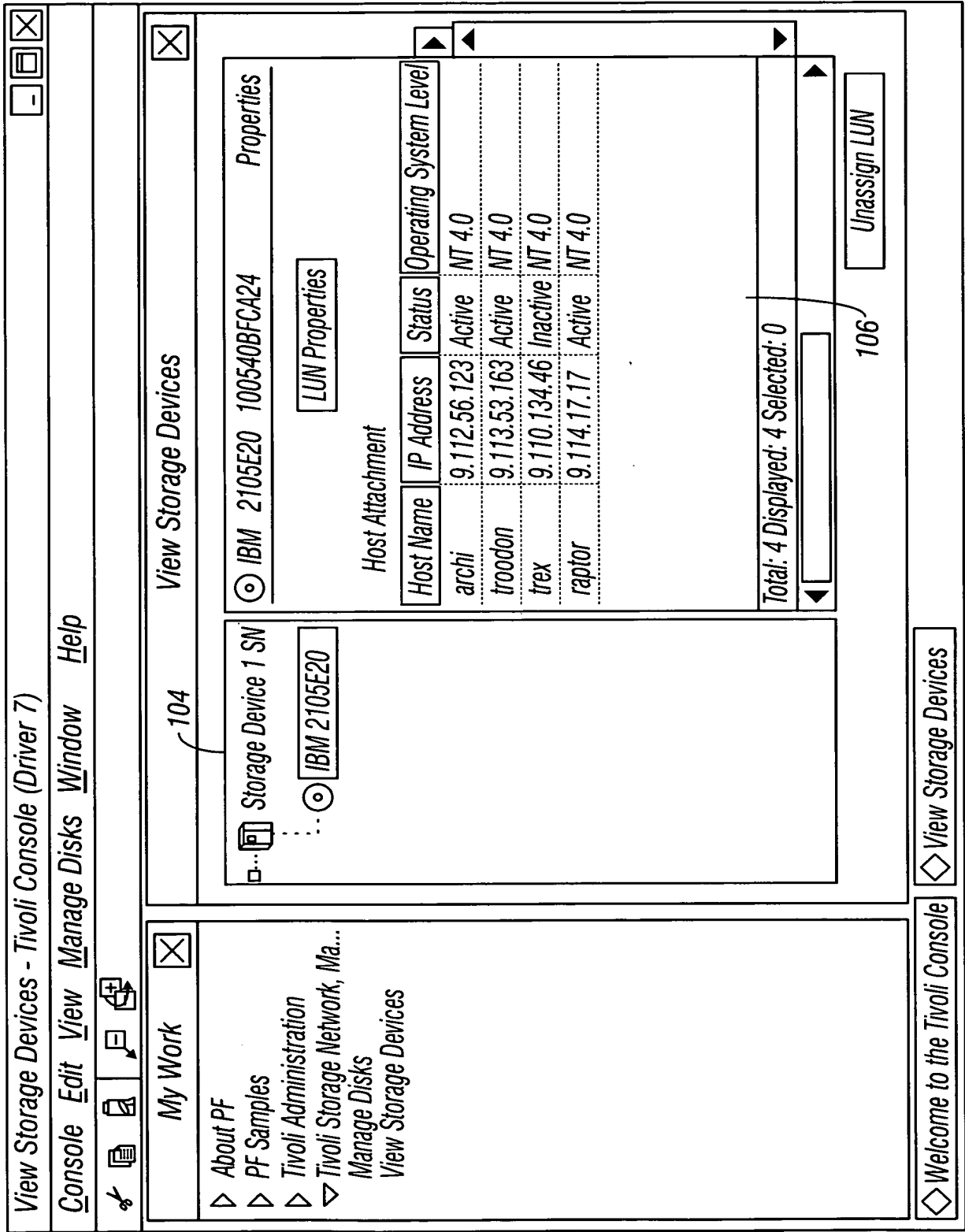
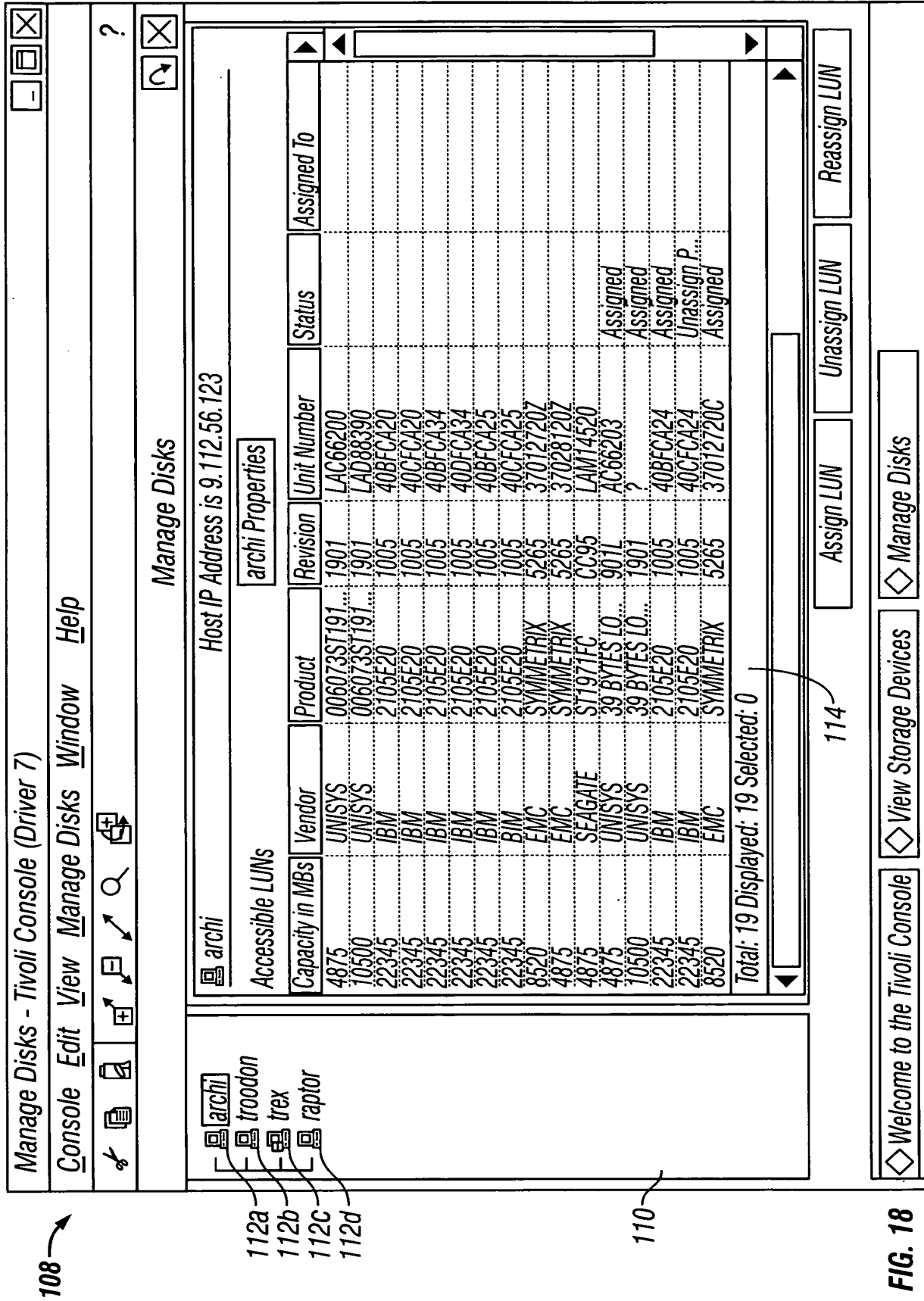


FIG. 17



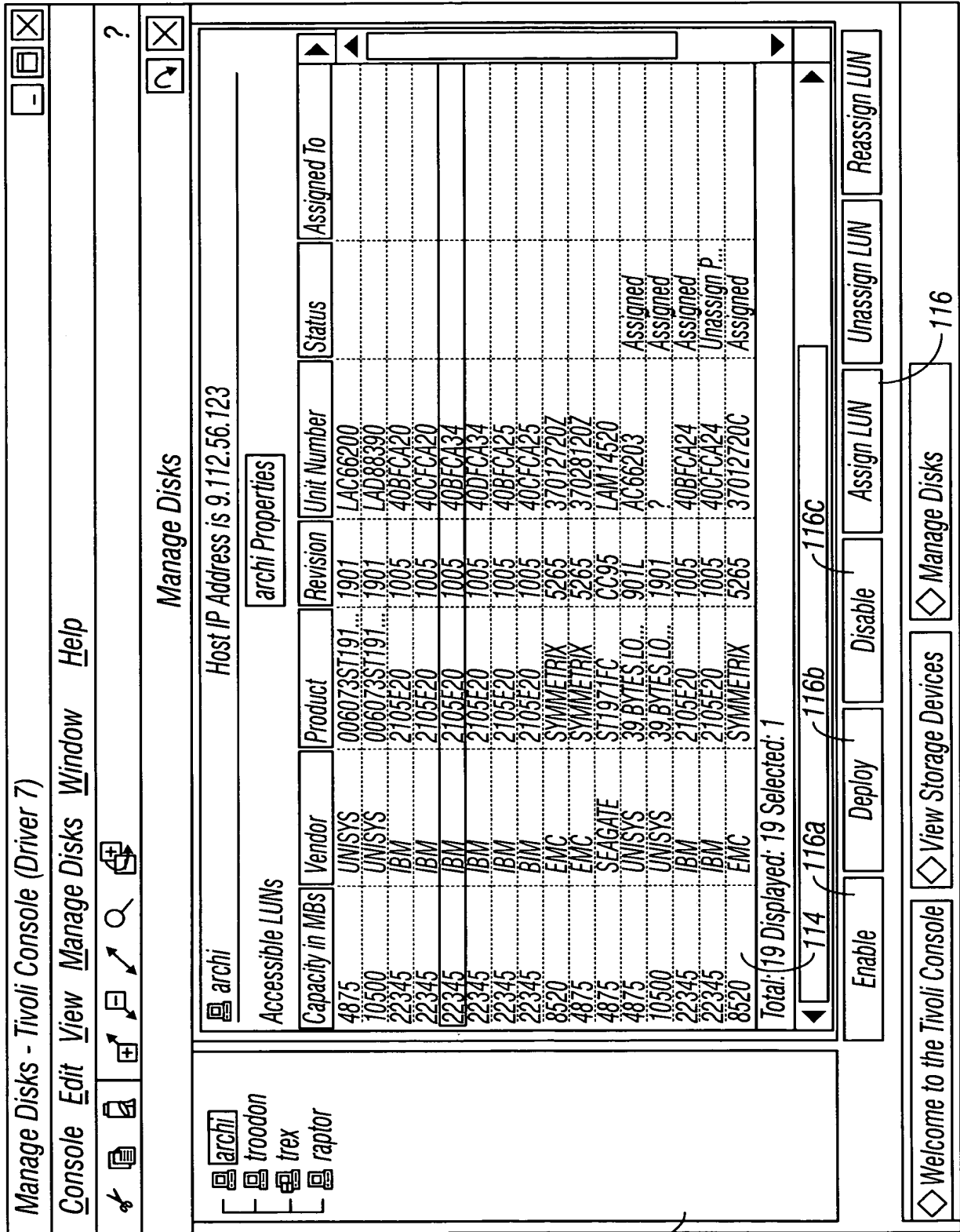


FIG. 19



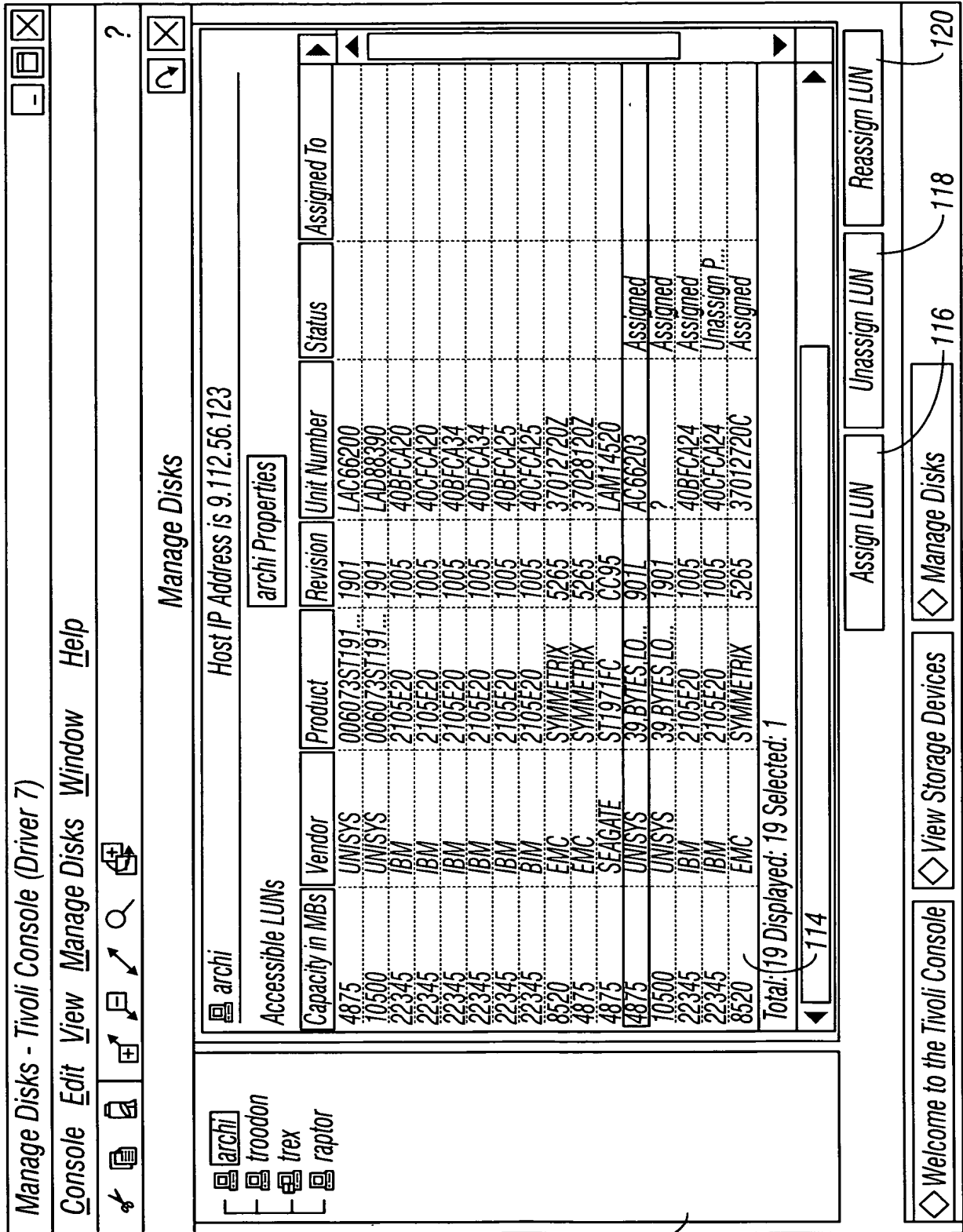


FIG. 20

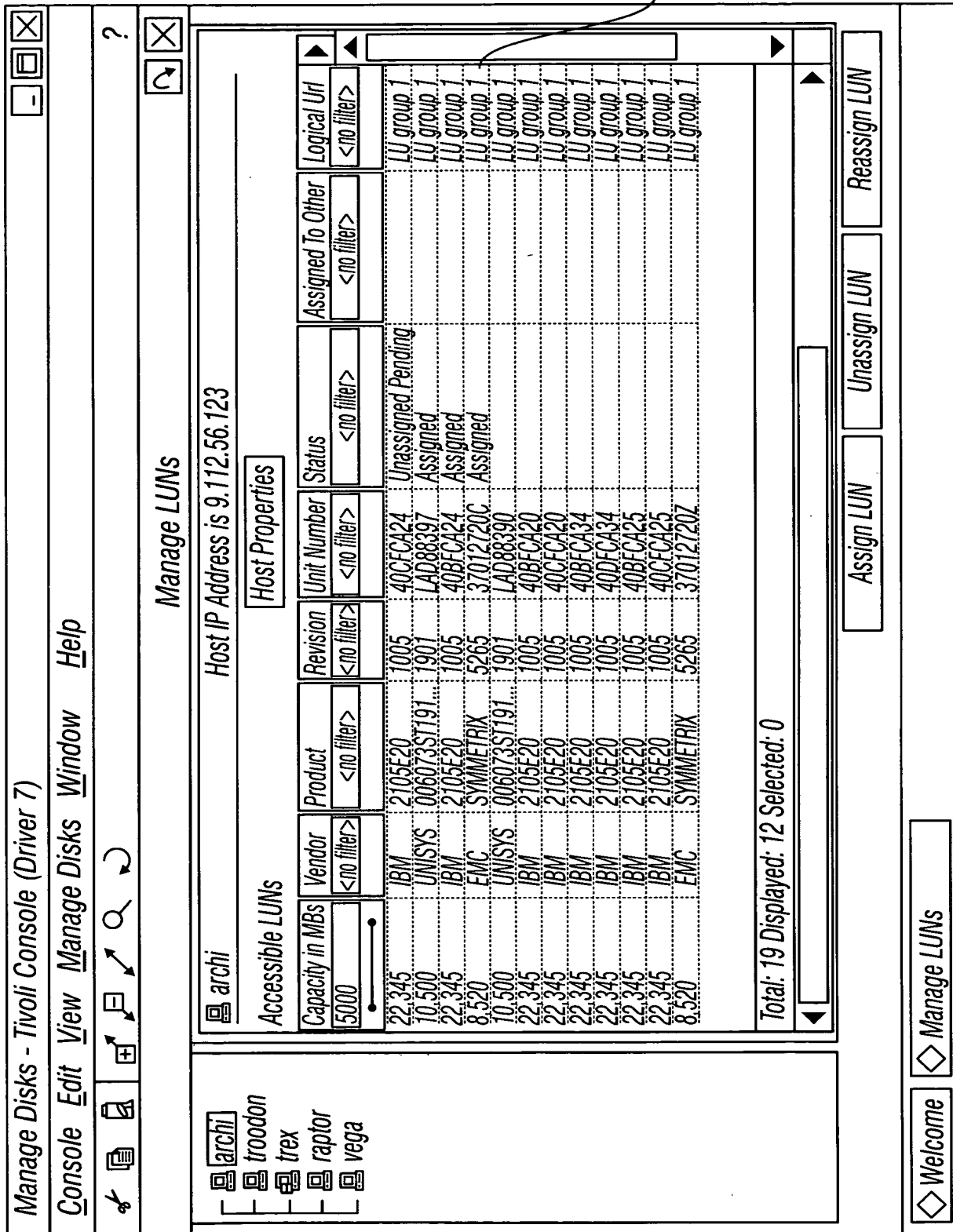


FIG. 21

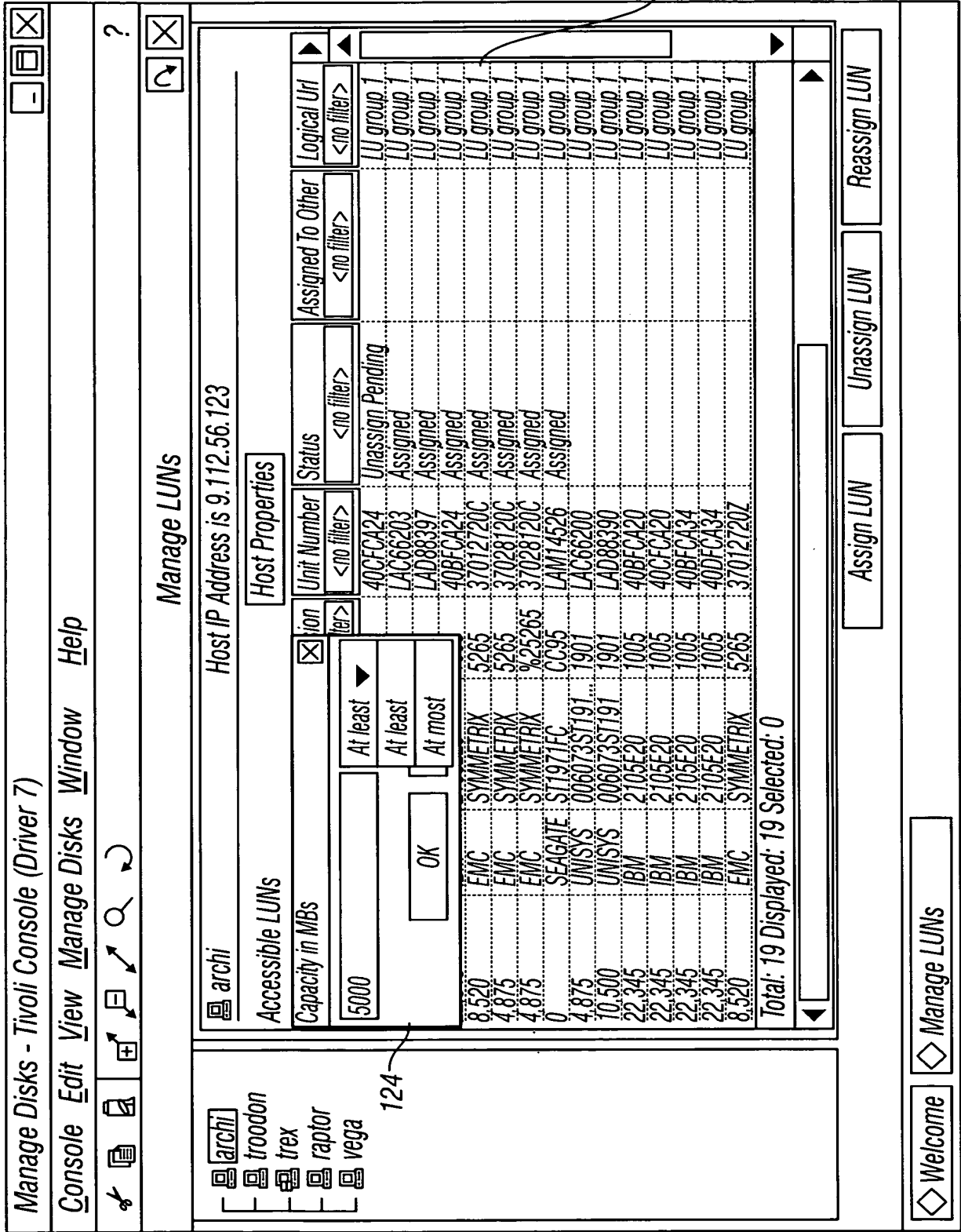


FIG. 22

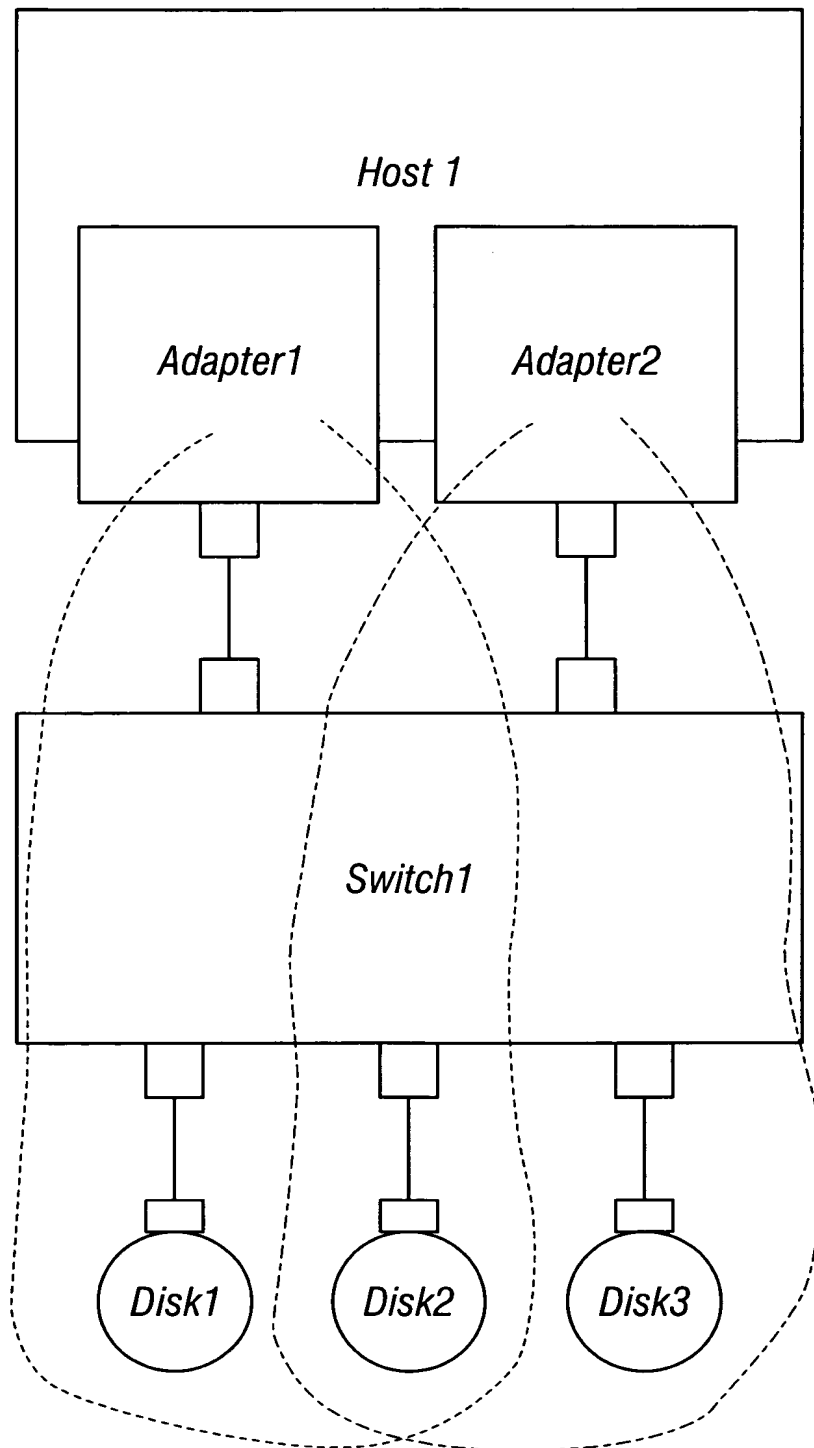


FIG. 23

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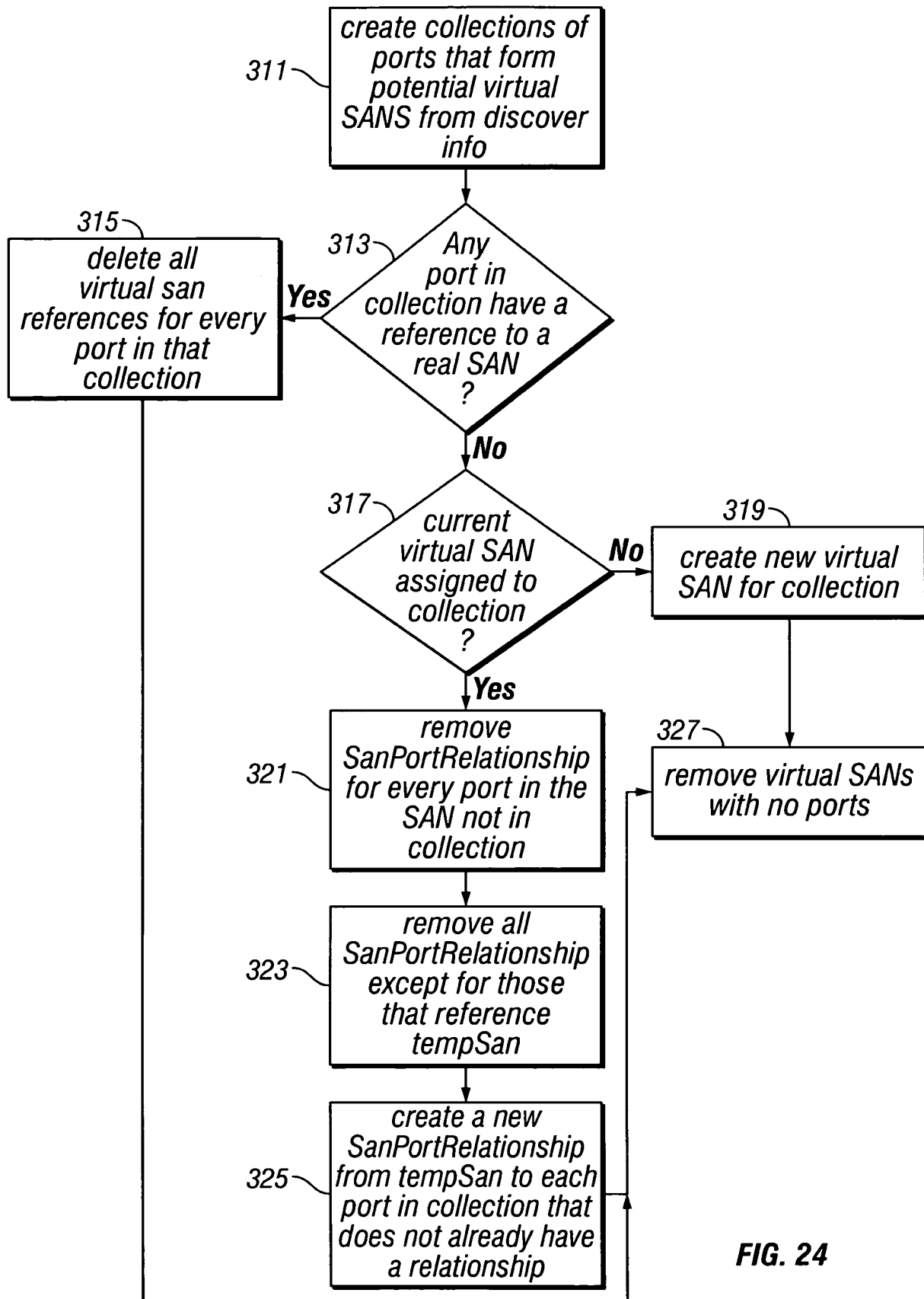


FIG. 24

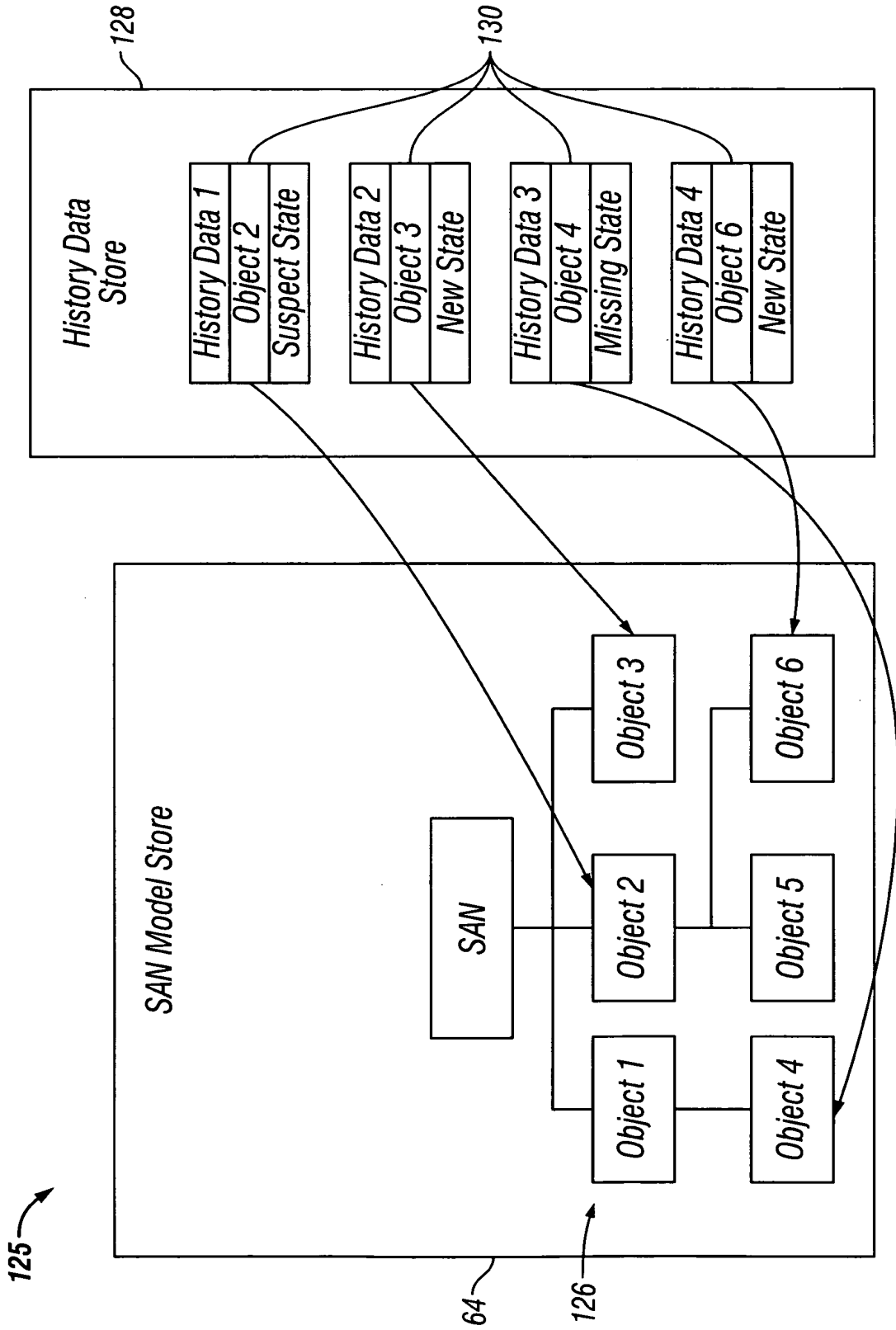


FIG. 25

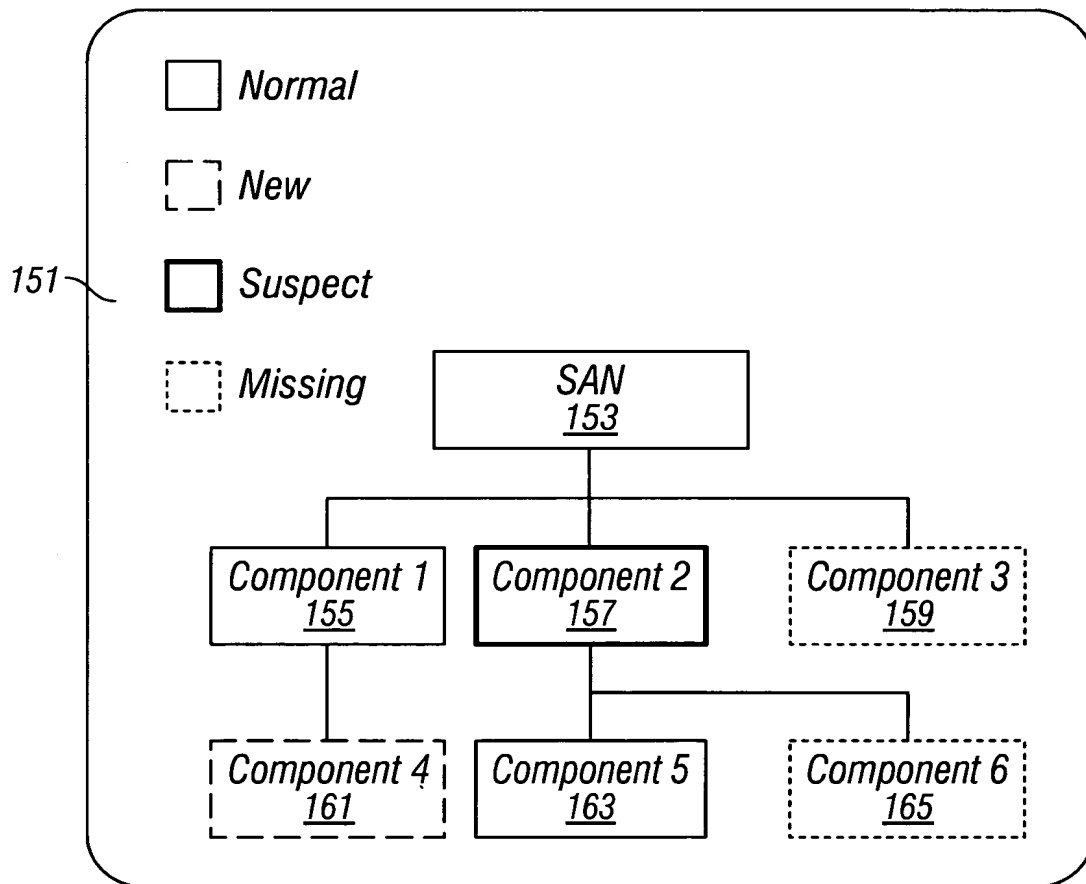


FIG. 26

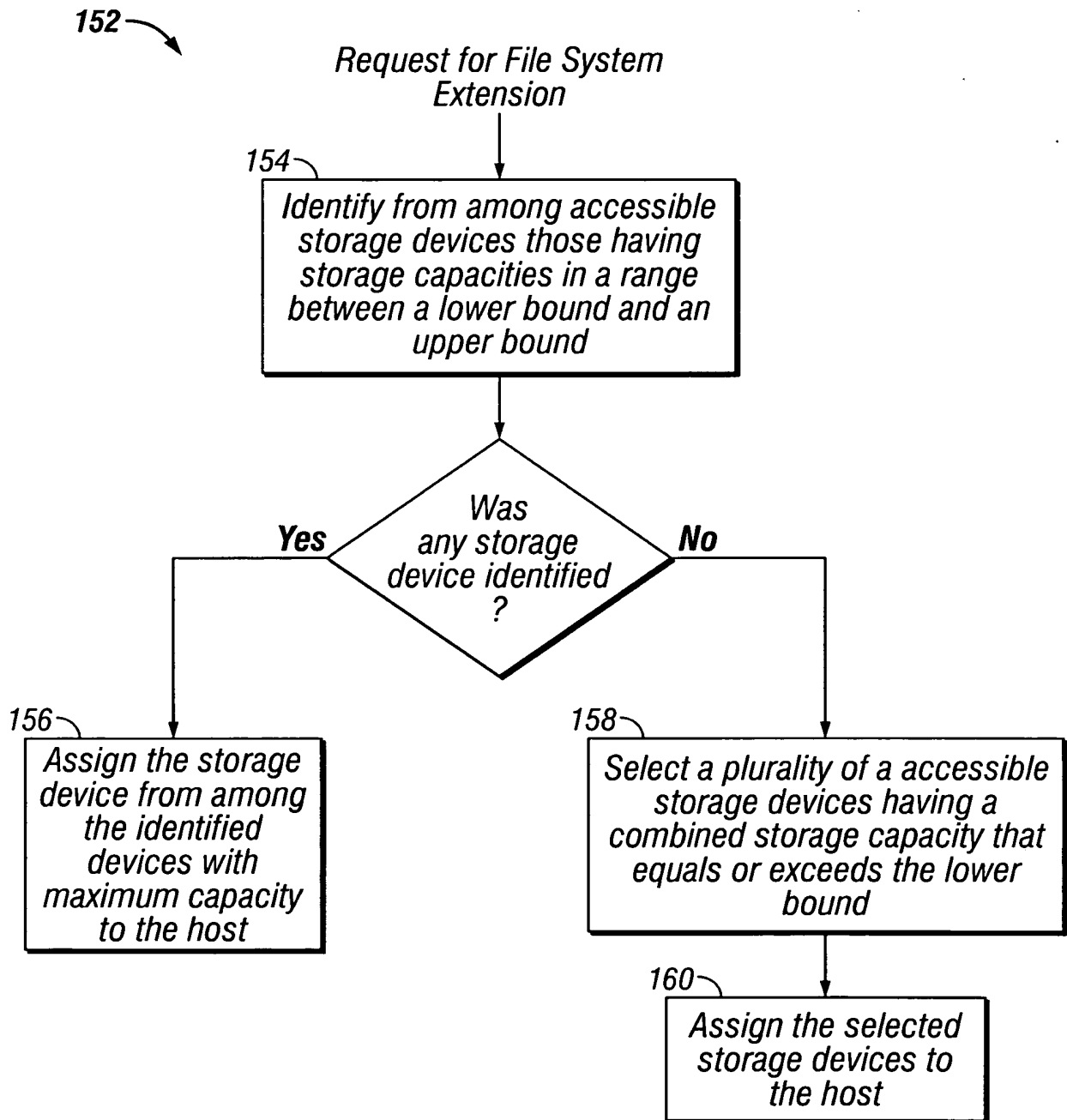
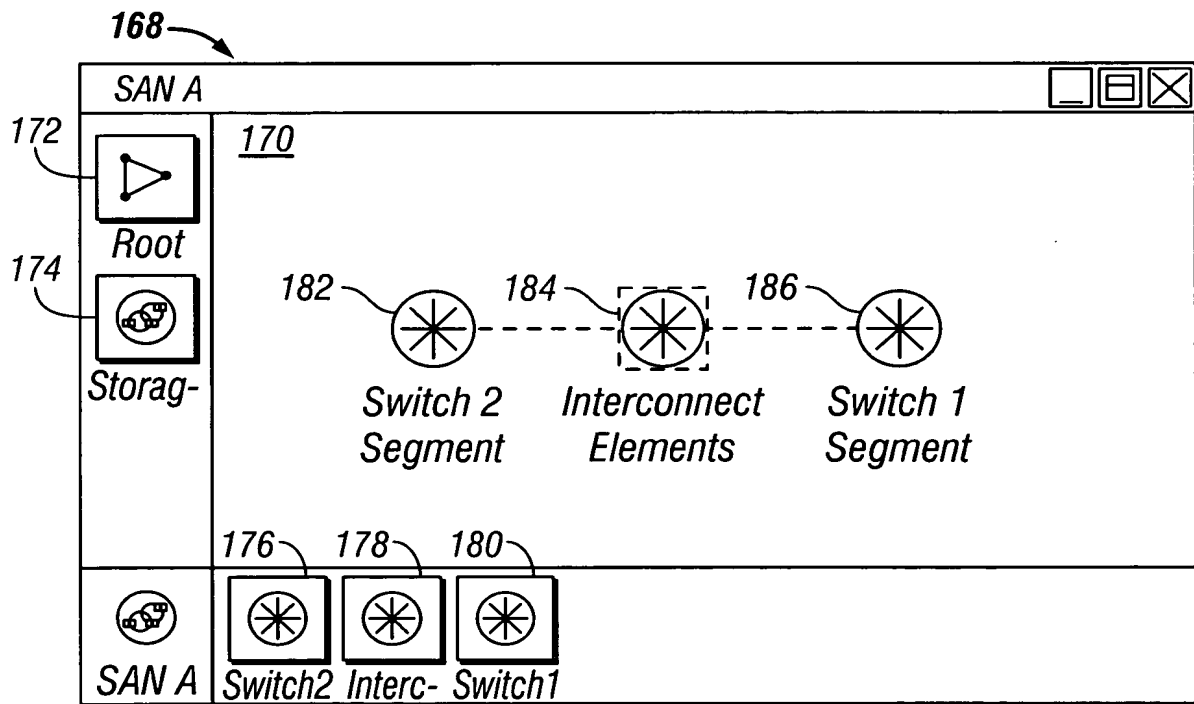
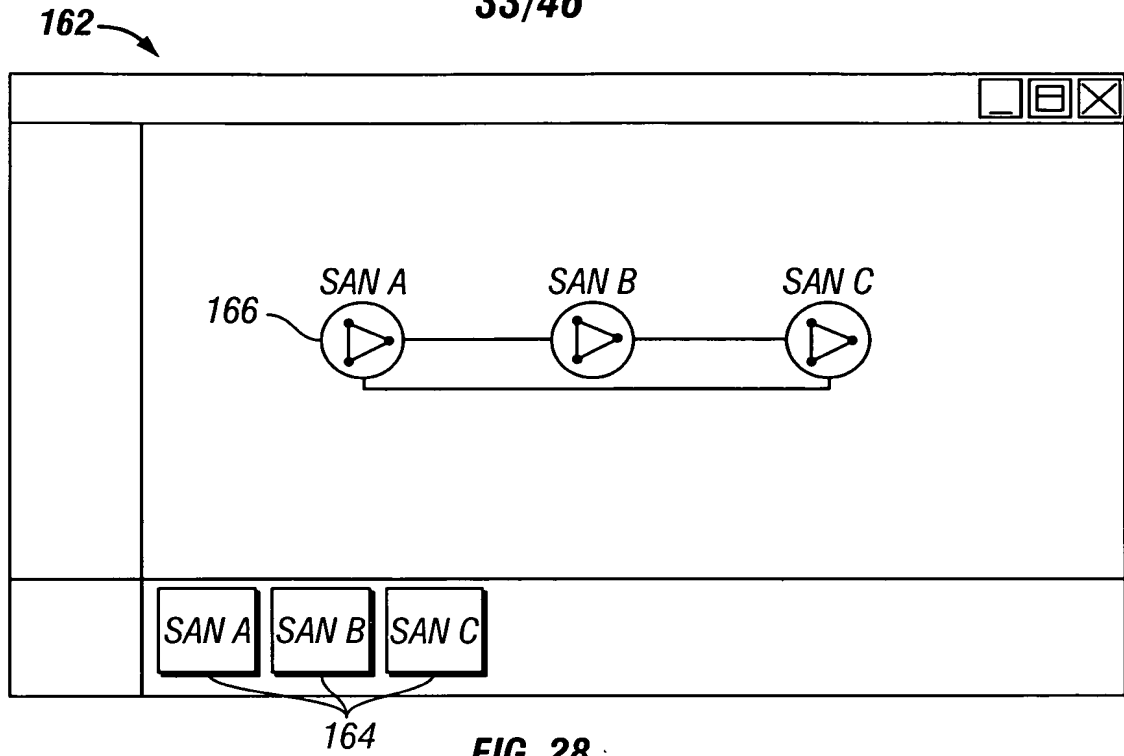


FIG. 27





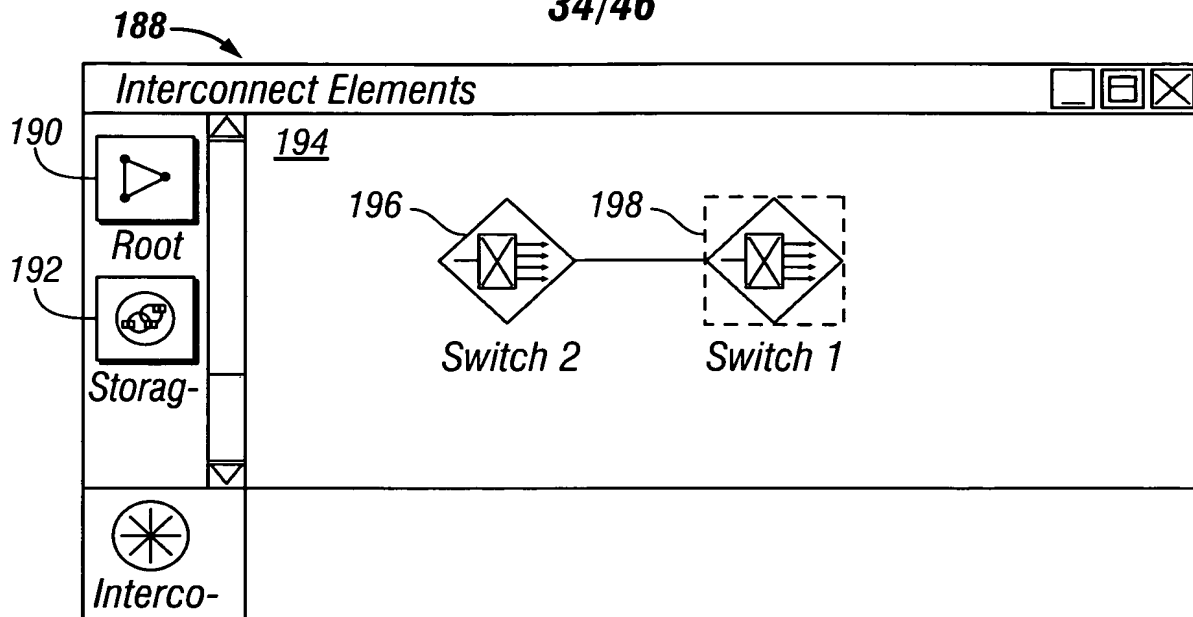


FIG. 30

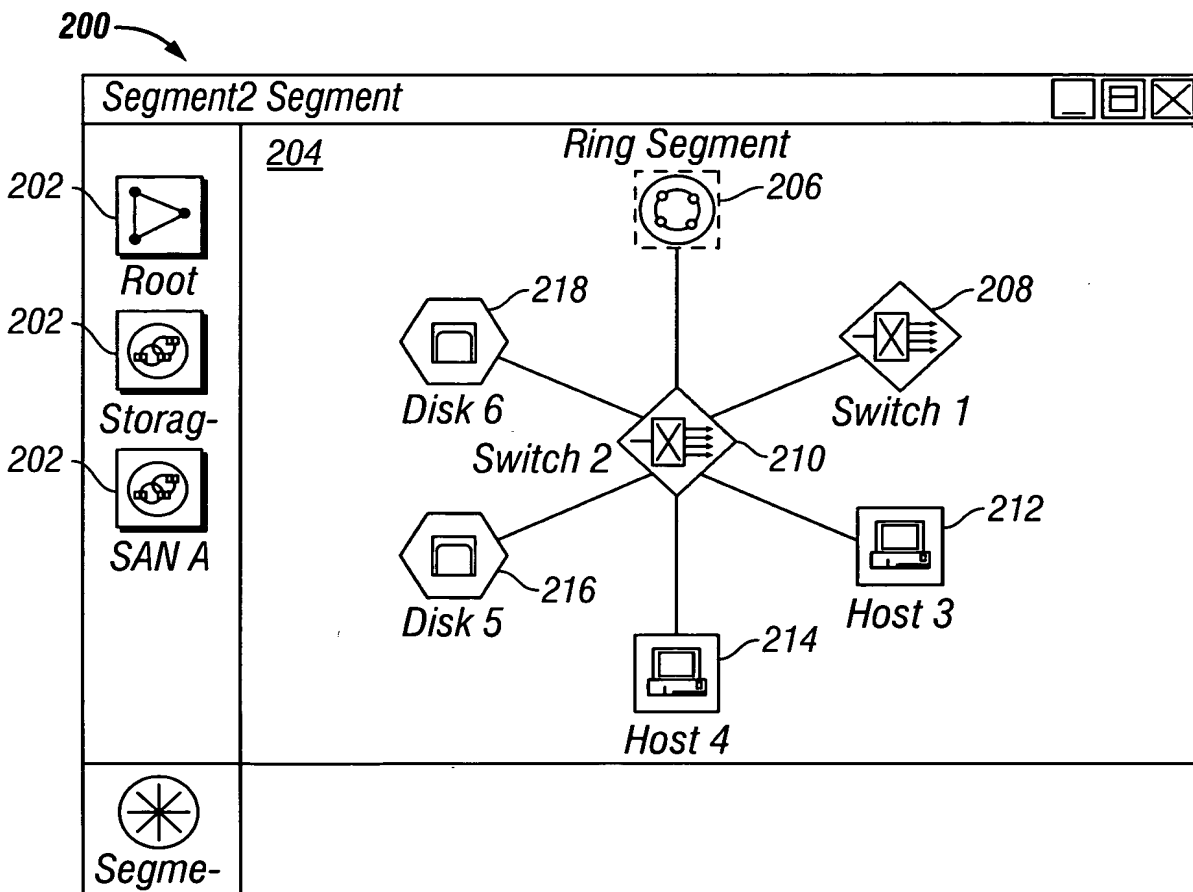


FIG. 31

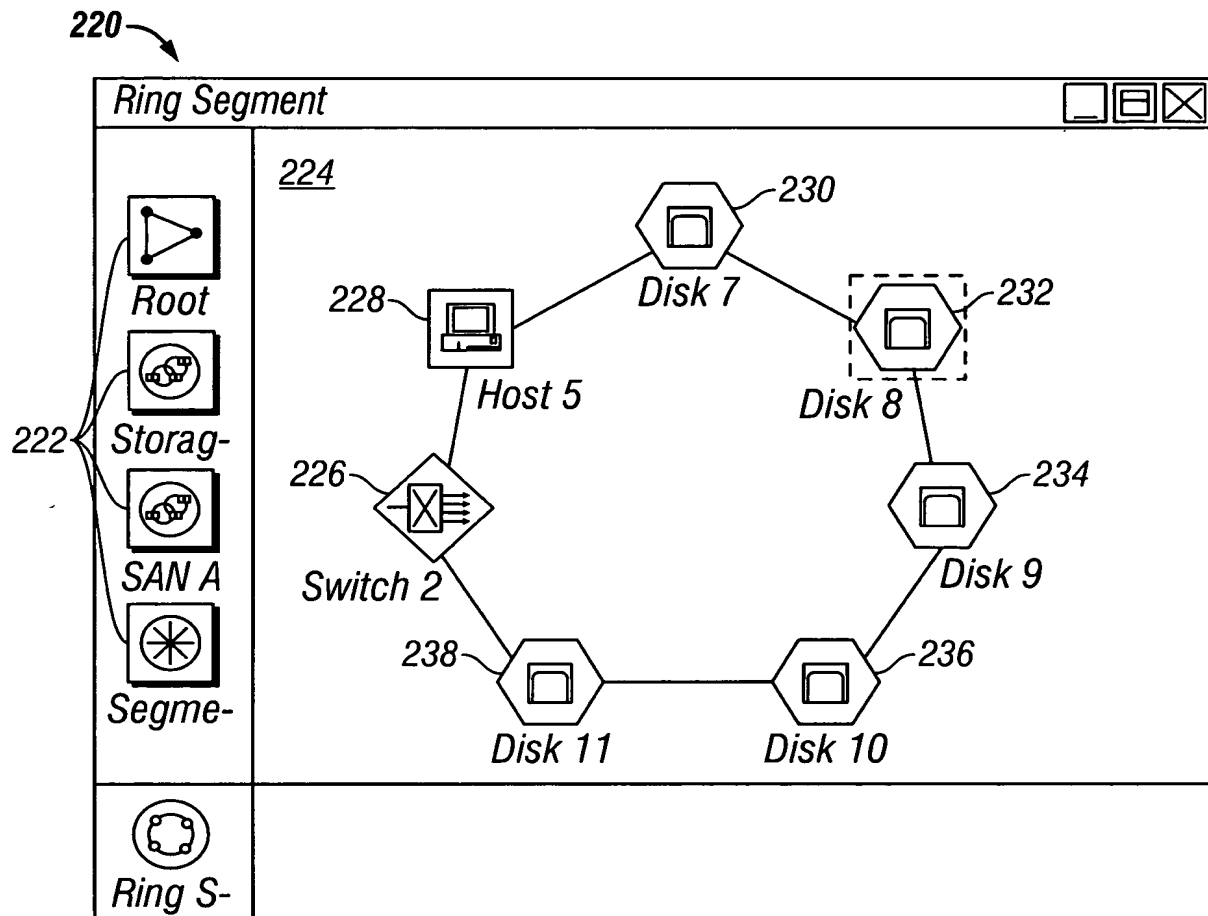


FIG. 32

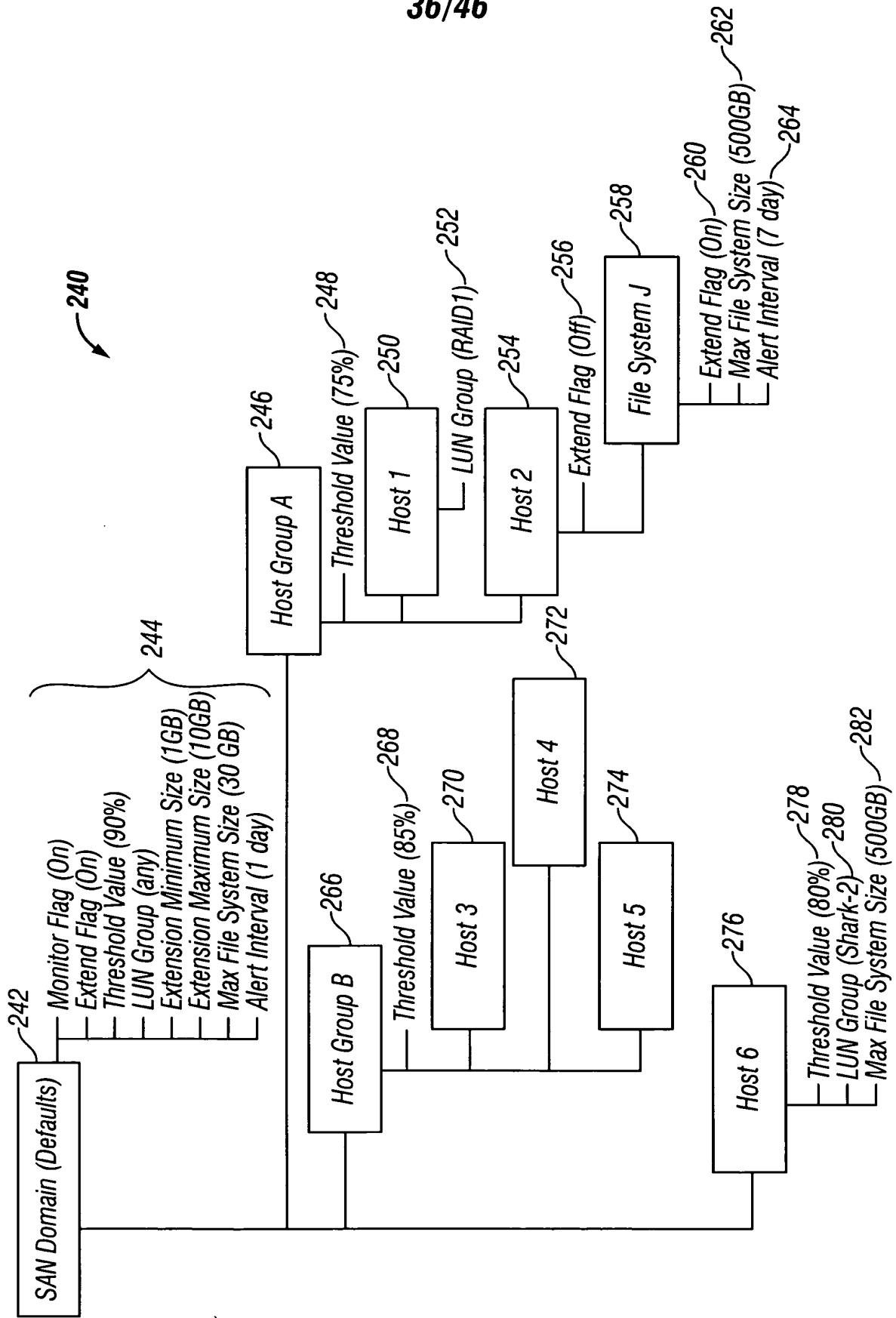
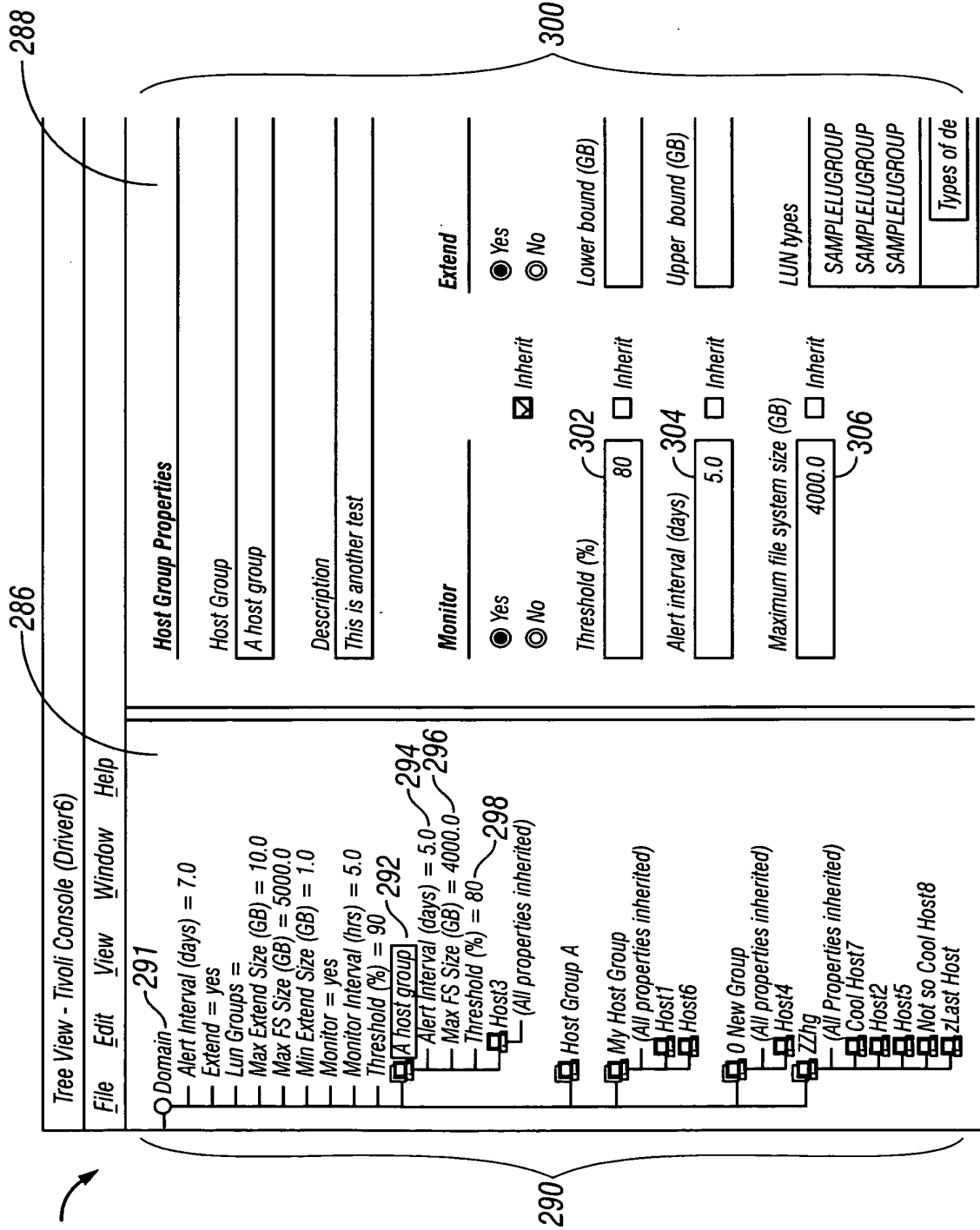


FIG. 33



**FIG. 34**

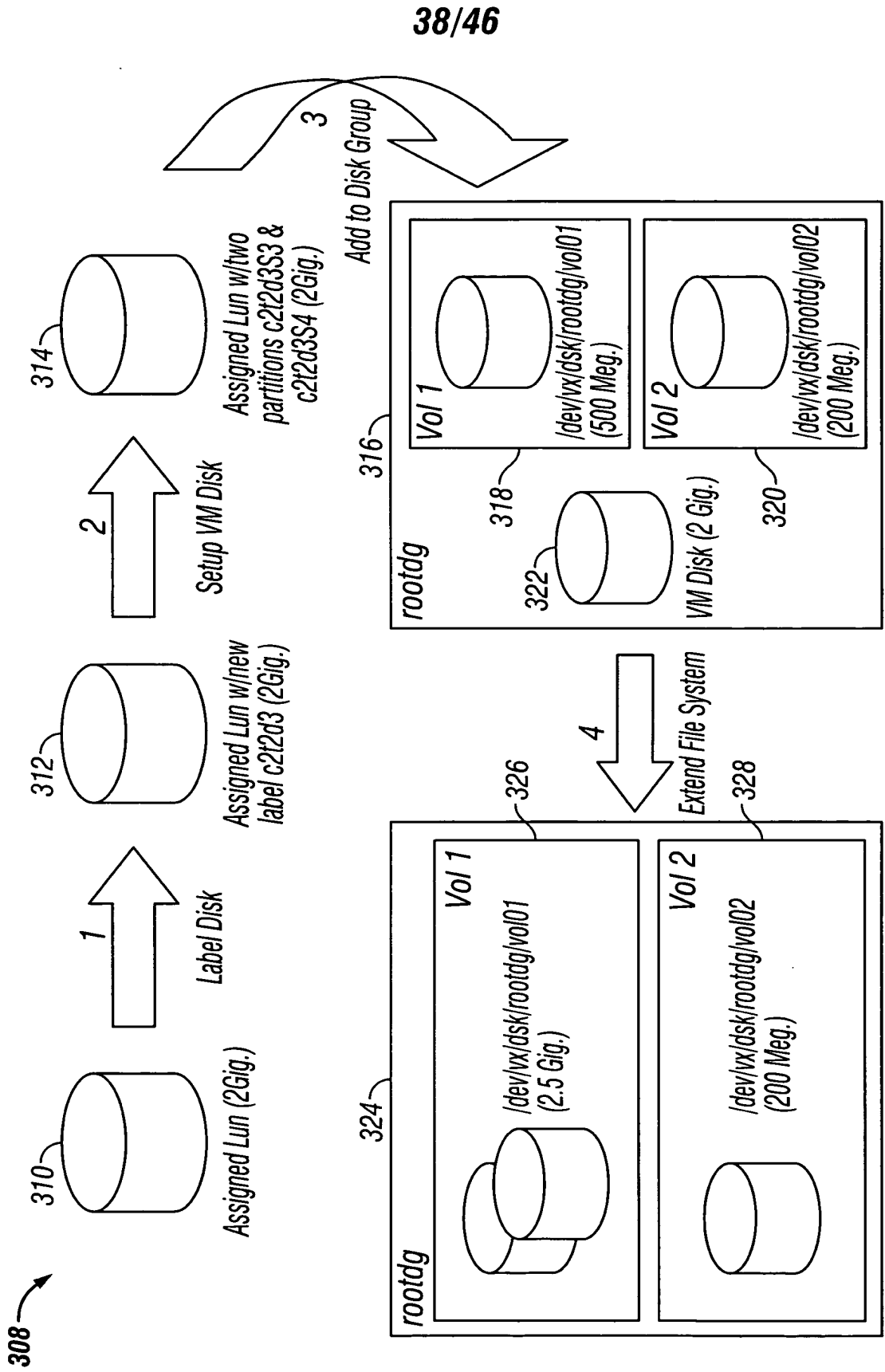


FIG. 35

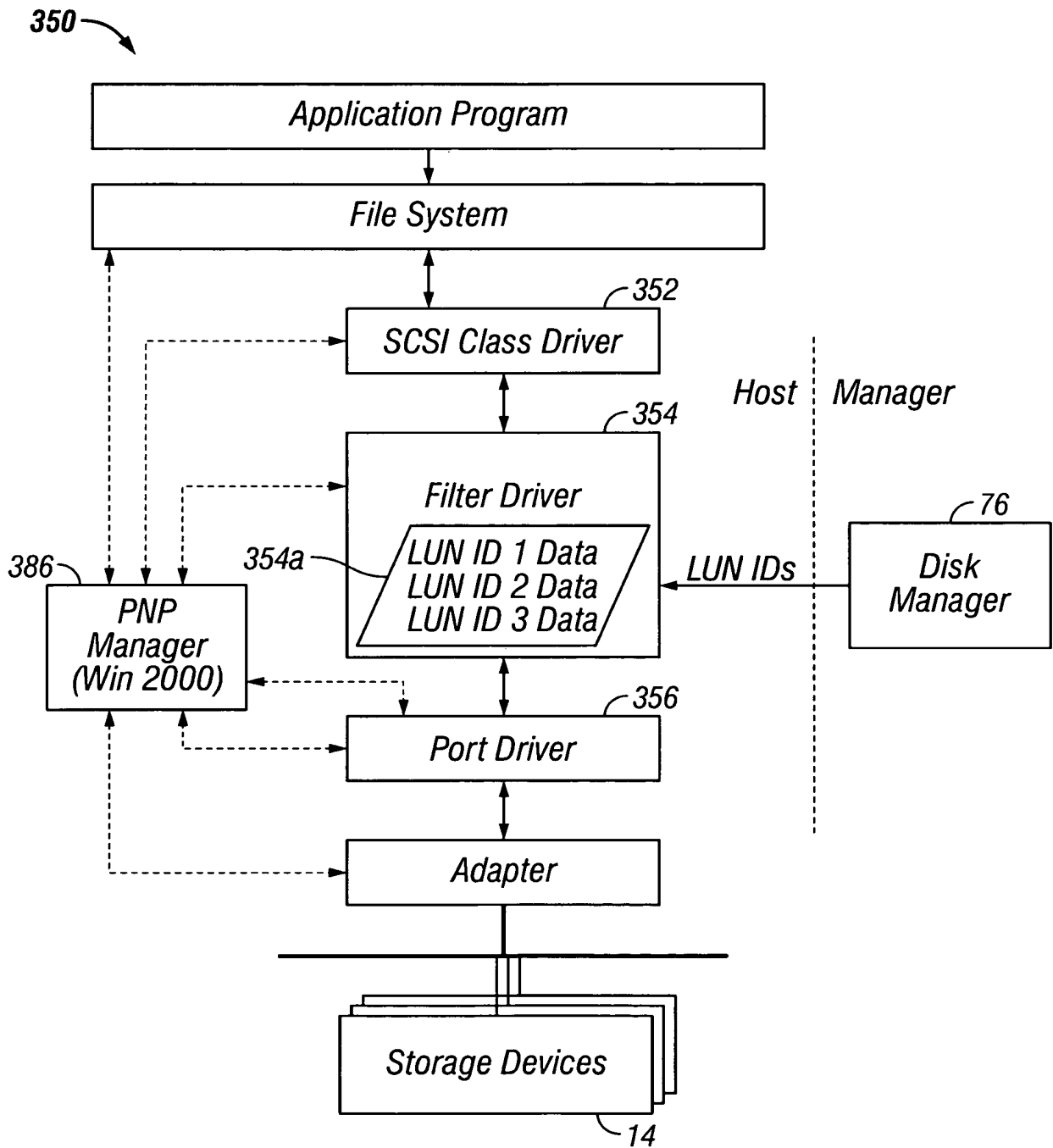


FIG. 36

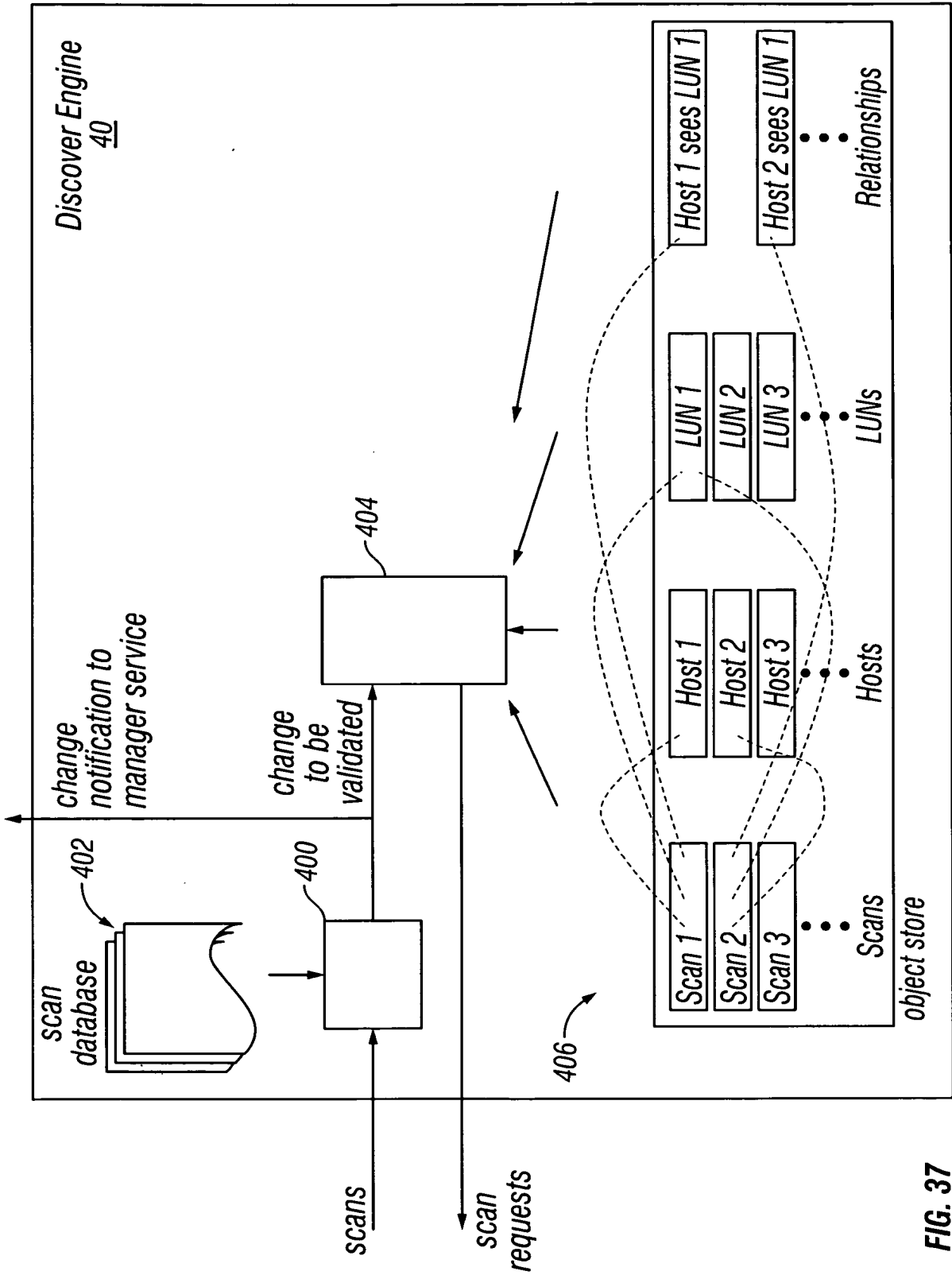


FIG. 37



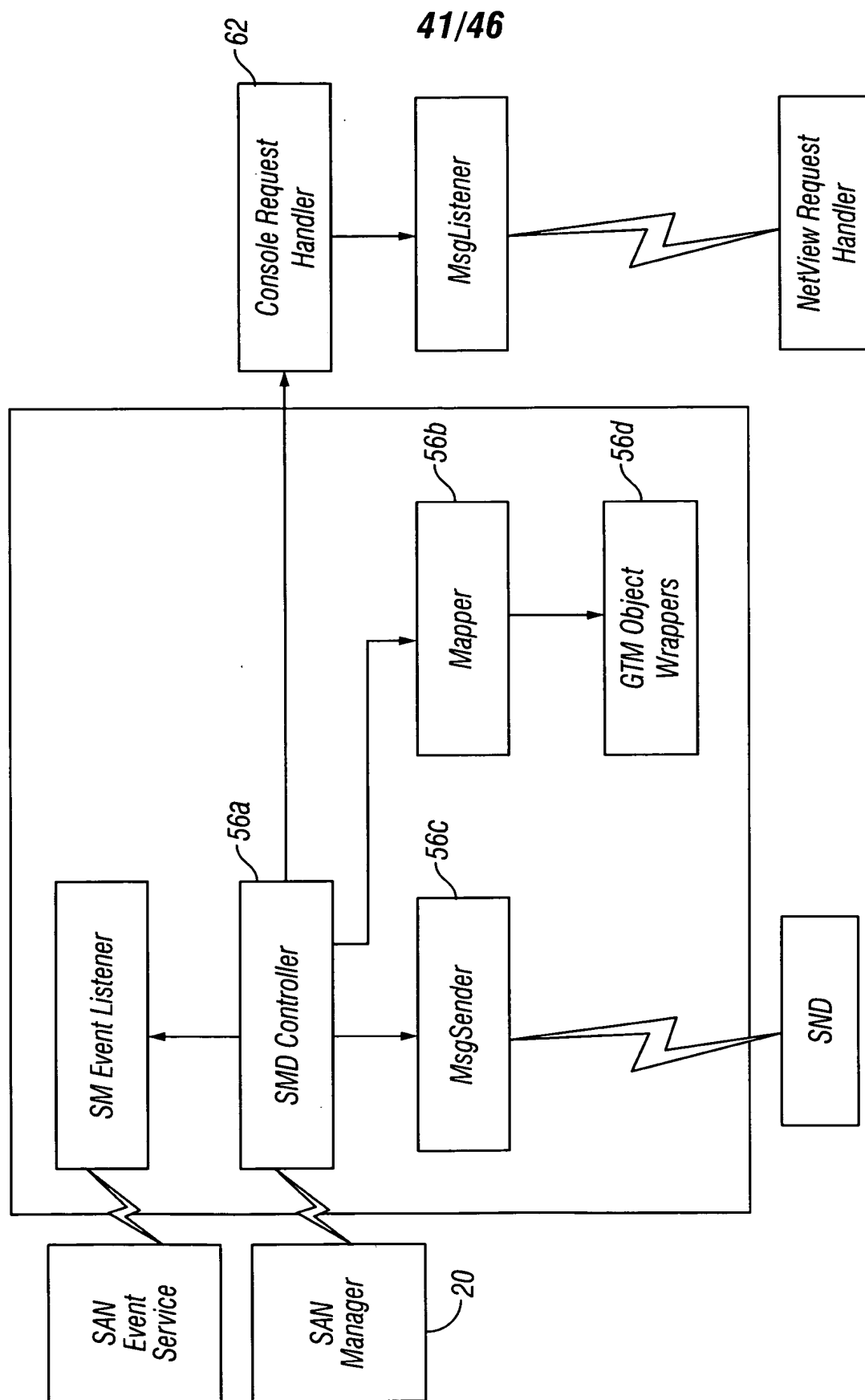


FIG. 38

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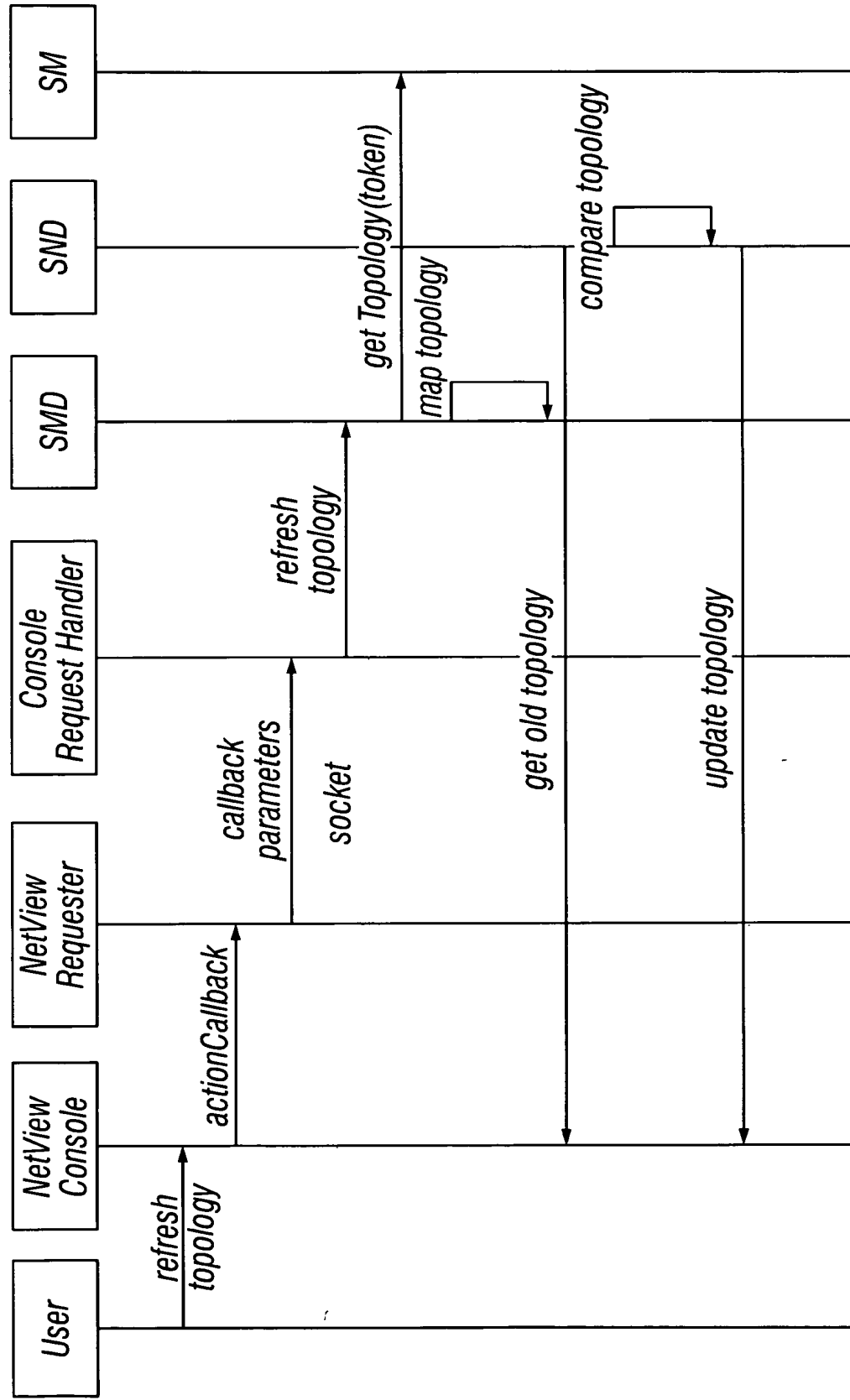


FIG. 39

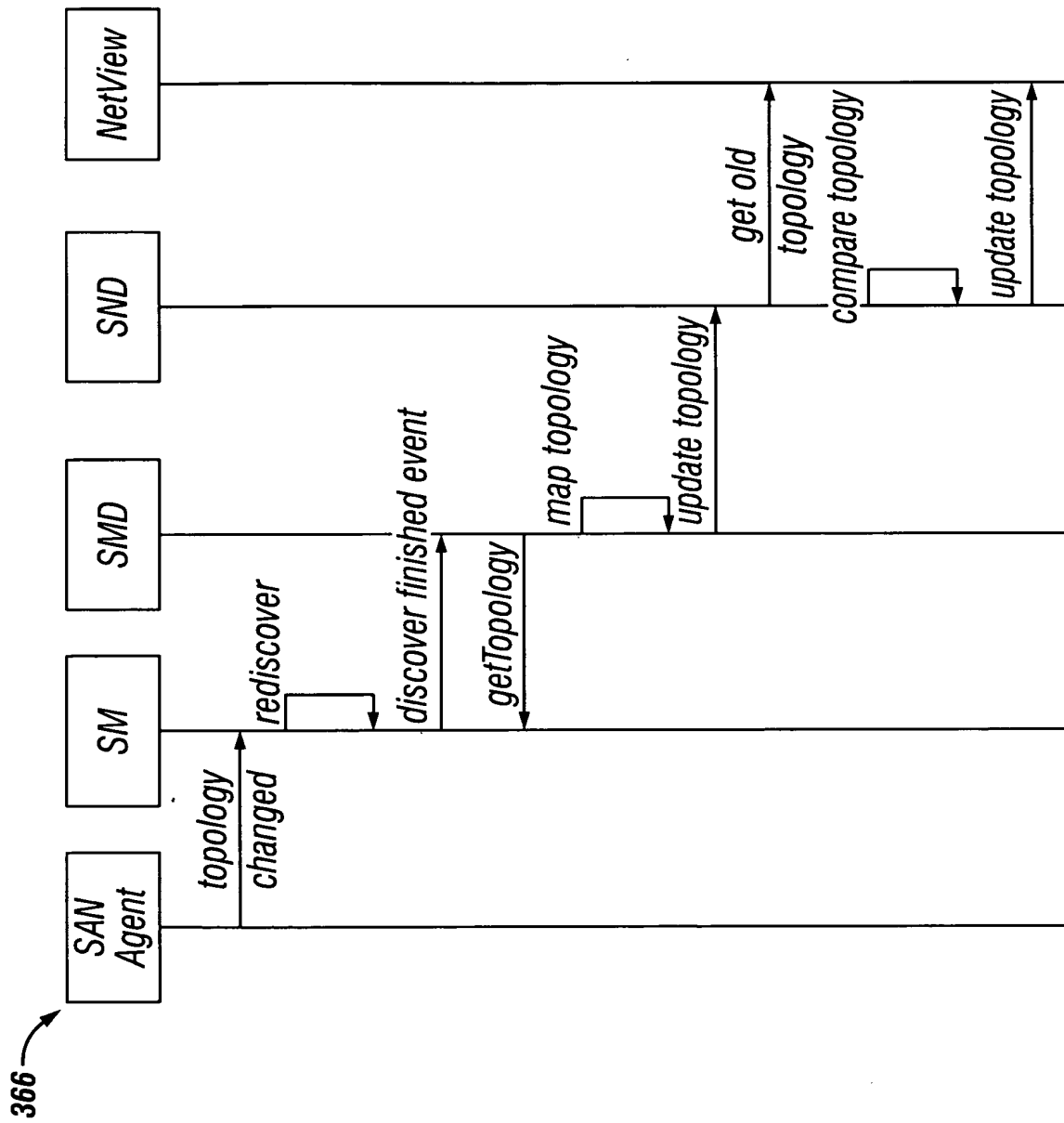


FIG. 40

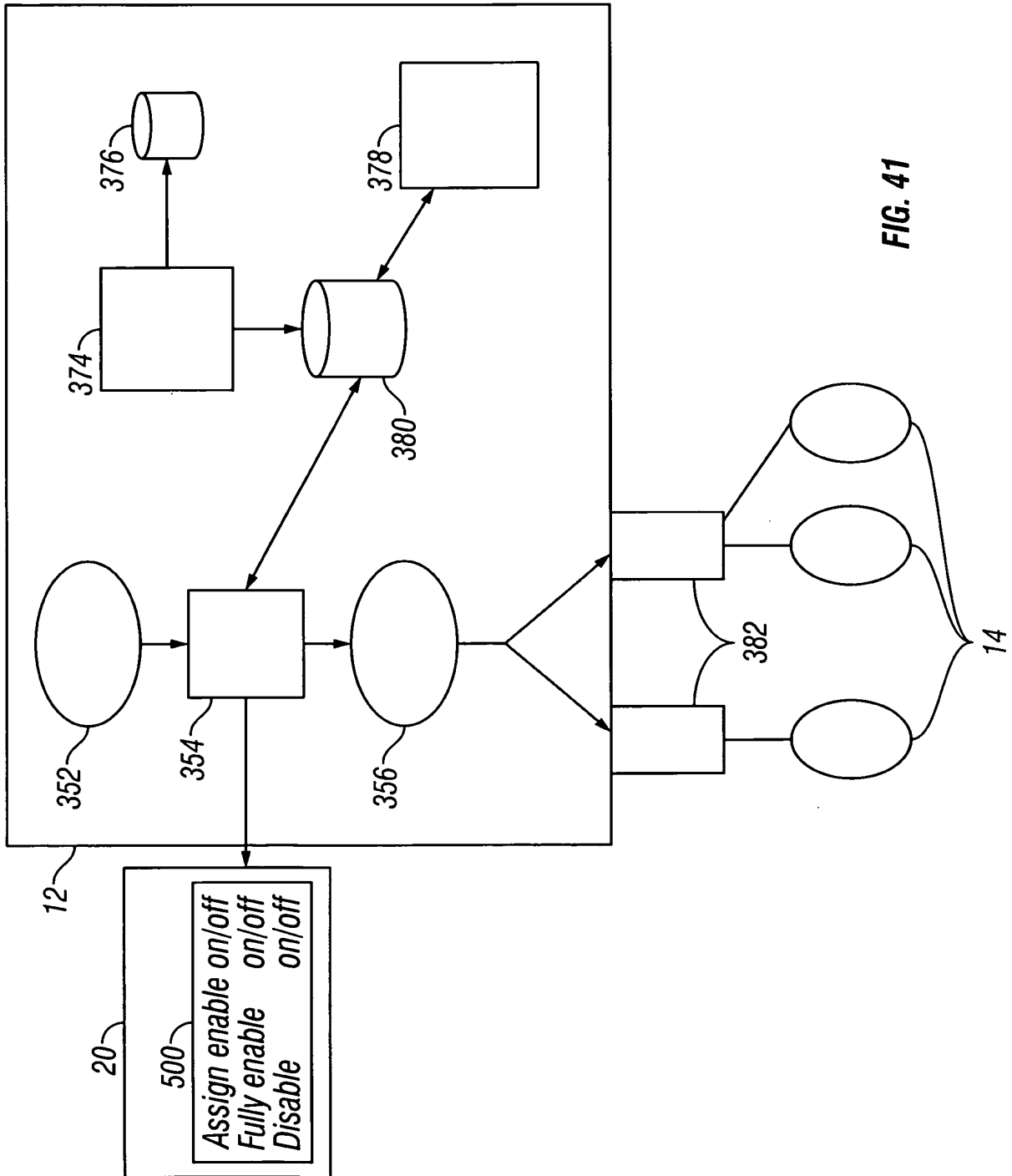


FIG. 41

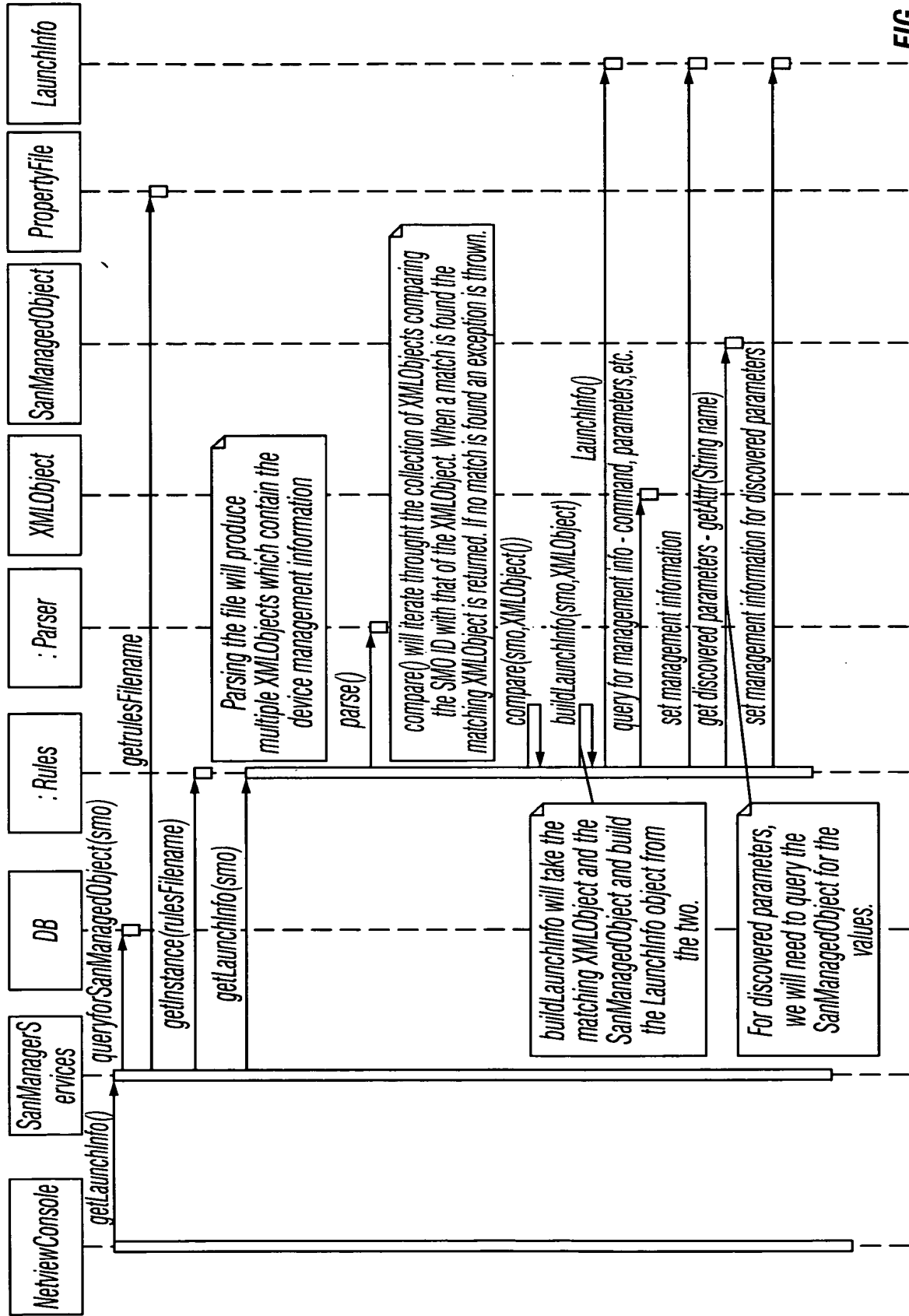


FIG. 42

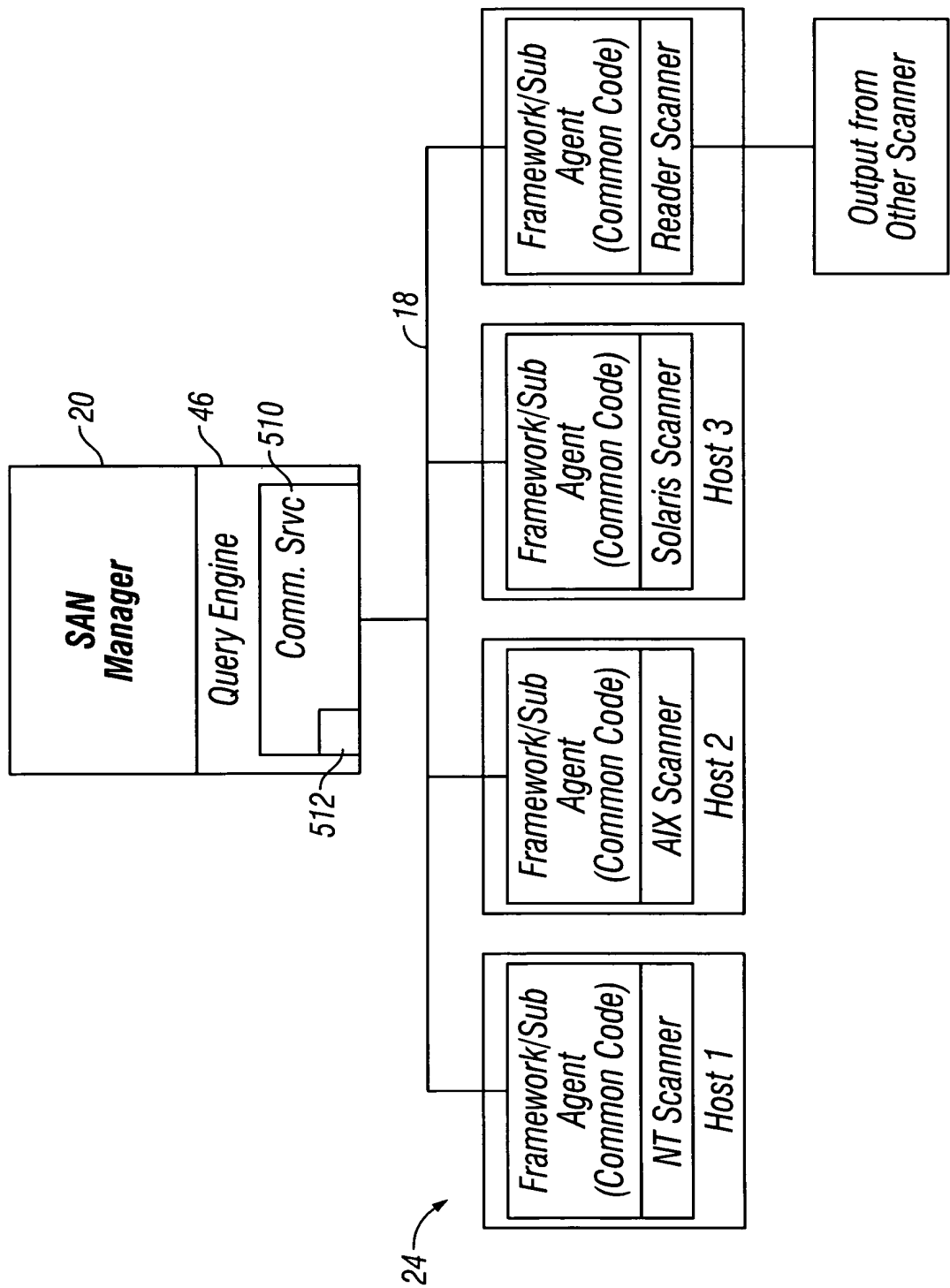


FIG. 43